

MANUFACTURERS' RECORD

A Weekly Southern Industrial and Hardware Newspaper.

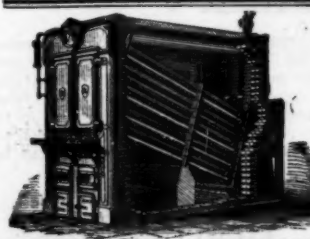
Vol. XII. No. 3. WEEKLY. BALTIMORE, AUGUST 27, 1887. \$3.00 A YEAR. SINGLE COPIES, 10 CENTS.

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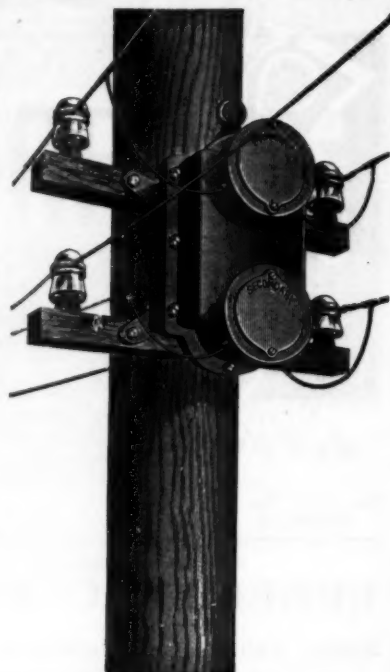
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The distribution of high tension alternating currents and their reconversion to low tension currents for incandescent lighting and running of motors, is broadly covered by patents owned by this Company.

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The United States Electric Lighting Company having notified us that they are engaged in the manufacture of alternating current induction apparatus in spite of the above notice of our patented rights, all persons are hereby warned that our patents not only cover the above system of distribution and conversion, but also many important details of construction, and that it is our intention to enforce our rights against all persons using the same, whether the apparatus is made by the United States Electric Lighting Company or some other manufacturer. The advantage of purchasing alternating apparatus from us are not only the low cost, efficiency and durability of our apparatus, but also that we own the foundation patents, and no person purchasing from us is liable to be sued for infringement of any other patents. On the other hand, the purchase of such machinery from any other manufacturer will render the purchaser liable to suit for damages, profits and injunction under our patents. Copies of correspondence between the United States Electric Lighting Company and ourselves in relation to the above matter can be obtained from us upon application.

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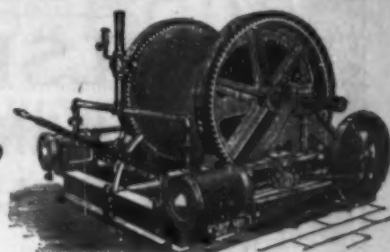
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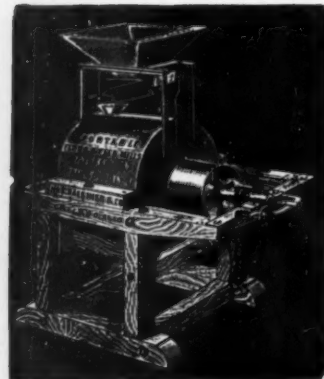
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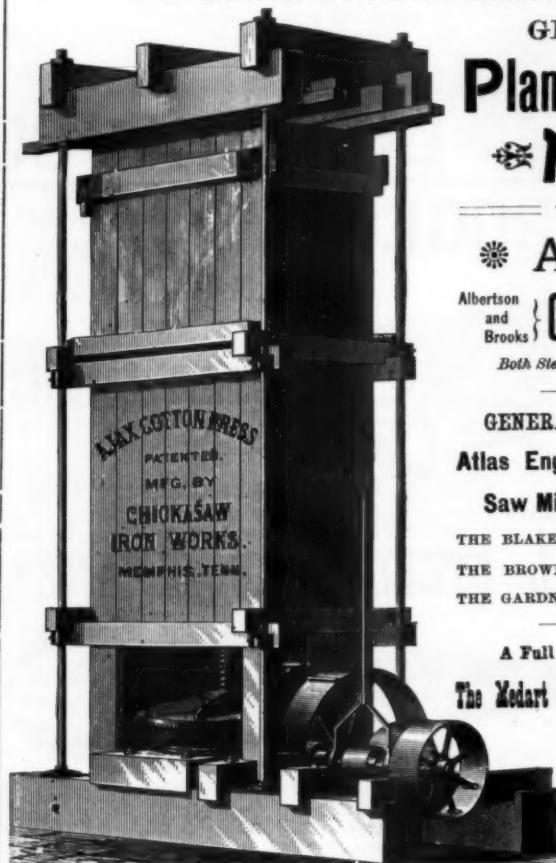
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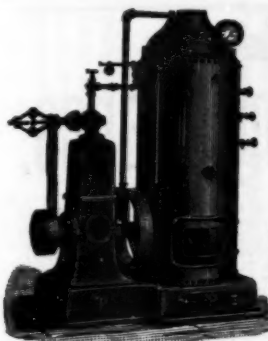


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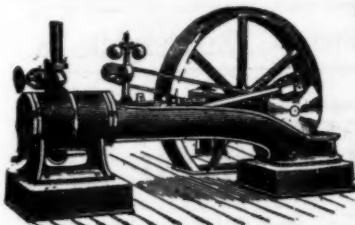
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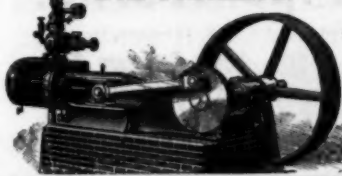
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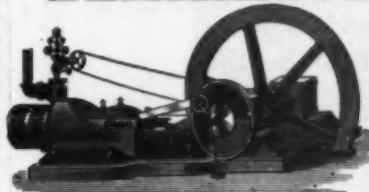
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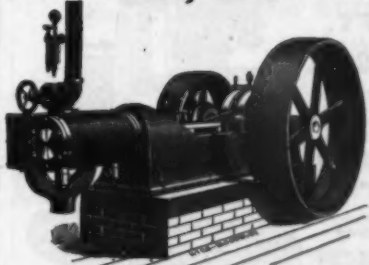
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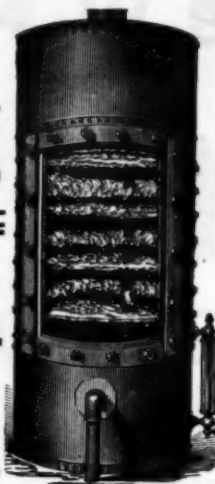
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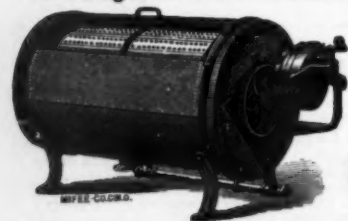
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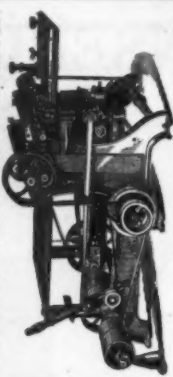


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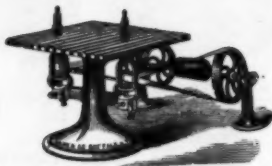
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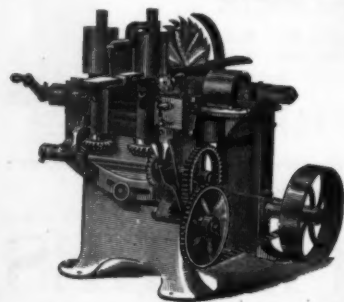
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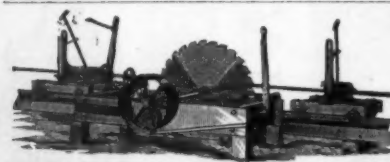
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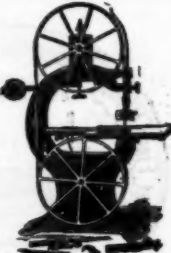
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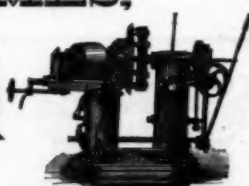
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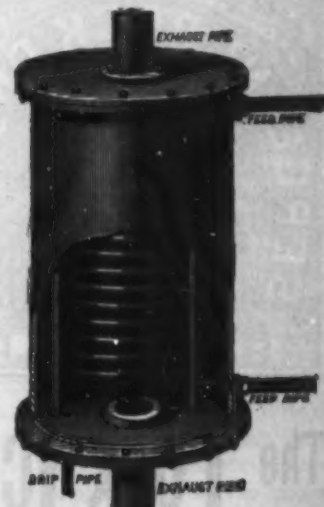
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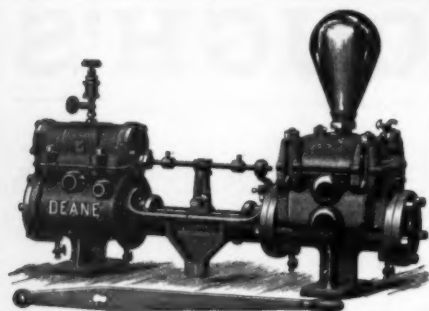
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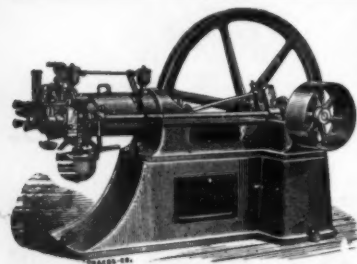
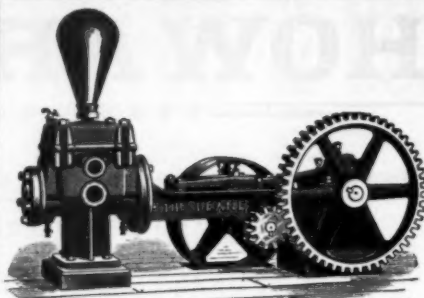
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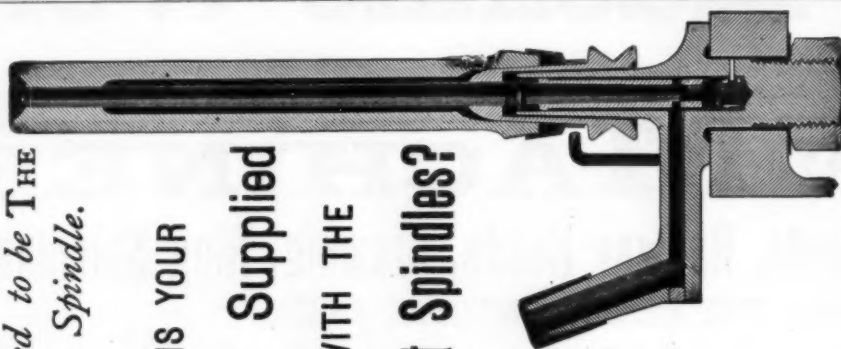
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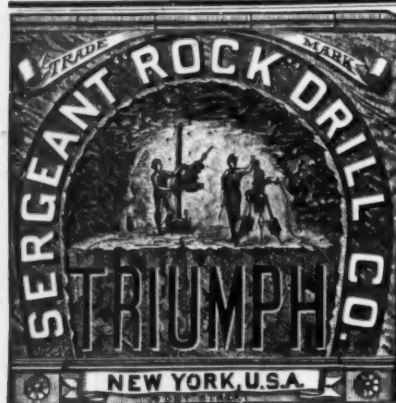
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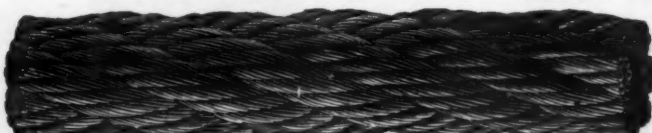
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BALTIMORE, AUGUST 27, 1887.

IN our next issue we propose to publish special reports from all parts of the South as to the crop prospects and the outlook for business in all the leading cities and towns of that section. That issue will be of more than usual interest, and will, we believe, be productive of great good by showing to the world the remarkably favorable indications for an unusually prosperous season throughout the entire South. The MANUFACTURERS' RECORD is sparing no expense of work or money in seeking to advance the South's prosperity.

IN this week's issue we present an interesting letter showing the growth of Chattanooga, one of the South's most prosperous industrial centers. The development of the manufacturing and railroad interests of Chattanooga is typical of the development throughout the South. During the last few days an experimental gas well has demonstrated the presence of natural gas at Chattanooga, and should the indications of an abundant supply for all purposes be realized, an immense impetus will be given to the growth of this place.

IN our last issue we referred to the reported discovery of large deposits of Bessemer ore near Birmingham. Of this ore the Birmingham Age says: "The ore is found in apparently inexhaustible quantities. The deposits have been opened and tested, and an analysis of about fourteen specimens, taken at random, shows as follows.

Peroxide of iron.....	74.71
Silica.....	5.31
Metallic iron.....	58.30
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THE editor of a leading Southern paper, in a private letter to the MANUFACTURERS' RECORD, says:

"Permit me to congratulate you upon the splendid service which you are rendering to the industrial interests in the South. May your own prosperity and that of the MANUFACTURERS' RECORD be in proportion to this service, and may you live to see every part of this glorious section alive with industry and enterprise, and attain that degree of development which its glorious natural advantages render possible."

A Contrast.

IN Columbia, S. C., a cotton mill company has been organized, but they have, it seems, had considerable trouble in securing a site at a reasonable price. One of the stockholders said a few days ago to a correspondent of the Augusta Chronicle:

"It was proposed to build our cotton factory on the canal and operate it by steam until the canal could be improved so as to furnish us the water power for the purpose. We have, therefore, been casting about for an eligible site on the canal, but all the owners of such property along the canal have gone to asking all kinds of high prices for sites had in view. While I can't tell you the figures demanded, yet you can say, land that now and for several years passed has produced nothing but a crop of weeds, is held at such figures that it will be a serious matter for the stockholders or directors of the mills to consider the selection of another available site elsewhere in the city."

Something of the same kind is reported from Jacksonville, Fla., by the News-Herald of that city, which says:

"There is food for reflection in what Mr. H. D. Roberts, of Kansas City, has discovered already in only a partial investigation into the facilities which Jacksonville offers to the capitalist contemplating investments here. Mr. Roberts represents a syndicate of capitalists who look with favor upon the establishment of canning factories here. Our nearness to the products of farm, garden, groves and ocean is signally in our favor, and transportation facilities are all that can be desired; but at the very outset the question of exorbitant rents confronts the enterprise and threatens to drive it elsewhere. What was said recently in these columns with reference to dwelling-houses applies with equal force to business quarters. It cannot be denied that investors in commercial buildings demand too great a profit upon their ventures. They not only make no concessions, but in many instances are shortsighted enough to allow their stores to remain vacant at a great loss rather than accept anything below what they have learned to regard as a fair return for the outlay. There is even a disposition in some quarters to advance the prices when the prospects of occupancy seem good.

There is nothing so discouraging to a new and untried enterprise as the burden of an exorbitant rent. It will drive business away from a city more rapidly than high taxes and high insurance. The landlord demands promptness, and a good tenant will not embarrass himself at the outset with this millstone about his neck. Lower rents mean new business, increased prosperity and rapid growth. High rents paralyze existing enterprises and choke off new ones. Jacksonville is always suffering from the extortionate demands of landlords, and will build up her business rivals to her own destruction unless a more liberal and public-spirited policy is at once entered upon."

IN striking contrast with these cases is the method of many Southern towns of offering, not only absolutely free of cost, sites for building factories or industrial enterprises of any kind, but also of adding to this liberal subscriptions to stock or the loan of money on long time. Under such circumstances it is not very difficult to judge where the greatest number of new enterprises will be located during the next five years unless there is a decided change. Suppose the projectors of a cotton mill at Columbia and a canning factory at Jacksonville had gone to Bessemer, Tuscaloosa, Anniston, Decatur, Gadsden, Florence or any of the other young progressive towns of Alabama, and instead of high prices they would have been offered a free site for their building and local subscriptions or loans if desired.

A Danger that Must be Averted.

COMPLAINTS as to the scarcity of dwellings and the exorbitant rents demanded continue to come from many of the industrial towns of the South. We have repeatedly warned our readers against this, and predicted that unless good houses at moderate rents were supplied, that there would be great difficulty in securing the workmen needed for the new enterprises now under way. Only a few days ago we received a letter stating that a clothing factory to employ 200 hands, mostly females, which it was proposed to establish in one of Alabama's best towns, would not be started unless the operatives could be assured of houses at moderate rents. Birmingham, as well as every other growing town in the South, feels the force of this scarcity of houses. Property owners have advanced rents to such a point as to make it impossible in many cases for workmen to secure comfortable houses, and some of Birmingham's big industries are on this account unable to secure as many hands as actually needed.

THE Age of that city in a recent article shows how such a condition of affairs is certain to injure the town, unless a remedy is found. Fortunately a few companies have set a wise example by building houses for their employees and renting them at low figures. This is a good plan, but to it must be added another, and that is to devise some way by which the workmen can purchase a home at a reasonable price, paying for it in installments. It will be impossible to build up a great permanently prosperous industrial center if land is so high that good mechanics and other men of limited means cannot afford to purchase homes for themselves. A home-owning community is the one where content and prosperity are to be found. If the great industrial enterprises of the South are to depend for their workmen upon men who have no permanent home there, they will be constantly finding themselves in need of hands to operate their works. A mechanic owning his home must of necessity be a far more valuable citizen than one who simply regards his present location as a temporary abiding place. The leaders in the development of the South cannot do a wiser thing than to devise ways and means to enable the working men to secure good homes at low prices. One of Baltimore's boasts is and for years has been that so large a proportion of her laboring population, mechanics, clerks and all others having only a comparatively small income, own their homes. These homes, too, are well-built, comfortable brick houses, many of them supplied with all modern improvements. Such houses can be purchased in this city at very low prices, much lower, in fact, than similar houses can be had

for in many places of less than one-tenth the population of this city, notwithstanding the cheaper cost of house building in the South, and such houses containing 7 to 10 rooms, with first-class improvements, including gas, water, bathrooms, stoves, &c., can be rented at from \$15 to \$25 a month. This question of providing houses for sale or rent at moderate prices is becoming a matter of great importance and it must be met. The future of some of the South's most promising towns will depend upon the solution of this matter.

The Farmer's Boy.

ONE of the most cheering indications of the progress of the South is the large attention it is giving to the rising generation. The men of to-day are working for the future as well as present. The sentiment pervading all the States of the Union, in so far as the native population is concerned, is, we must fit our youth to use wisely the splendid heritage into which they are soon to enter. Amid all the bustle and hurly-burly of these stirring times, that thought is coming more and more to the front and prompting men to action. The solid foundation on which every civilized nation stands secure is its agricultural population. Destroy that, and the death knell of the nation would be sounded. Wealthy men by liberal benefactions have founded such great universities as the John Hopkins, the Tulane, and the Vanderbilt. States have built up others like that of Mississippi, or the Agricultural and Industrial College just coming into existence in North Carolina. The MANUFACTURERS' RECORD rejoices in all these institutions and recognizes their surpassing value. But something more is needed. The one curse of the South to day is that so many of the brightest of its youth are leaving home for other sections. It is useless to ignore the fact; let us rather seek the remedy. To find it we must get at its cause. Why do any of the Southern farmers' boys leave home? For this, their natural surroundings cannot be the reason, for no part of our broad land has greater natural attractions or equal opportunities for success in life. If nature is not in fault, who is? That is the question. The MANUFACTURERS' RECORD believes that the greatly increased circulation of newspapers has much to do with it. We do not, therefore, oppose journalism, not by any means. If we had our way the circulation of the daily and weekly press should be increased until every family in the land took one or more newspapers. There is no possibility of over-reading in America. The danger lies in its opposite. "A little knowledge is a dangerous thing," says the proverb, and the experience of the human race confirms its truth. The less one knows the greater his danger; the more one

knows the greater his safety. Why then do we say that newspapers are disturbing the minds of farmers' boys and luring them from the farms to the cities? Because we wish to show the cause and the remedy. What is the newspaper of to-day but a mirror of the busy world of yesterday? If it fails to be that it ought to be suppressed. Every farmer's son or daughter who reads the papers feels a stirring, an impulse, for something broader and more exciting. Life within the narrow horizon of a farm seems to be dull in comparison with that which pulses and flows in the cities. "Oh, if we could but get where something is going on, how happy we should be," say these discontented youth. Pretty soon the boy catches up his bundle and starts in search of his fortune. In very many cases he fails to find it, and looks back with a longing, aching heart to the home he abandoned. It is too late for him to return, however, and so he plods along in a duller routine than that of the life he was so eager to escape. Such has been the experience of tens of thousands of farmers' sons in the great cities and towns in all parts of our country. How then shall the glamour the newspapers create in the minds of our farmers' boys be blown away. We think the grangers of North Carolina have discovered the true remedy for the evil. Put in few words, it is this: Give the boys and girls something to look forward to with delight. The encampment and institute at Mount Holly was their experiment in this direction. It is to be repeated next year. Its real motive, underlying all others, was to give to agriculture that social life that every one, except a misanthrope, desires. The farmers' institutes, held at Concord and other places in that State, are helps in the same direction. At all there has been that taught that would prove of real benefit. There has been also an interchange of social amenities that are not possible to the same people on their widely separated farms and plantations. An honest and innocent frolic in which farmers and their families participate must conduce to the good of all. Let gatherings of the Mount Holly kind be imitated throughout the South. They will give new life to parents and children. Sociability is the life of young people; the absence of it compels them to seek it elsewhere. If all the farmers in every Southern neighborhood should attend similar assemblages to that at Mount Holly, their agricultural interests would be greatly advanced. And if every farmer's boy knew that in addition to all other recreations, he would have the annual privilege of spending a week at a great picnic where innocent amusements, social opportunities on a large scale, helpful information, and instructive exhibits of the work done by others, were all to be enjoyed without cost, he would lose much of that insatiate longing for new scenes

and new faces that the newspapers had incited, and he would look forward to the event with as eager hopefulness as German children anticipate the advent of Kriss Kringle.

If the farmers' sons and daughters are to be the agriculturists of the future, they must learn by experience that the home life of the farm is the happiest and the best. The future successful farmer is to be that one whose intelligence keeps abreast of the times, whose knowledge is accurate, instead of doubtful, and where home life is beautiful and happy. When the Creator placed primeval man in the garden He indicated thereby the place of highest enjoyment for perfect humanity. When the fall and curse followed, the race and the land felt its baleful effects. Slowly through the ages man has been uplifted from his lost estate and carried more and more near to original perfection. The curse upon the ground has slowly been removed in proportion as man, through the divine light illuminating his intelligence, has been able to wrest from nature her secrets, and so gradually to assist in restoring primeval perfection. In these days all science, all intelligence, are enlisted in the service of agriculture. To all who will see it the fact is as palpable as sunlight. Teach our farmers' boys and girls to see and to understand this fact, and from thenceforth they will remain to bless the land in which they were born, and to join in the work of building up its waste places. Education, culture, social comforts, happy homes, useful lives—these are the birthrights of the American farmers' boys. Let the South see to it that her children receive unimpaired their heritage, and all will be well.

The Proposed Tonnage Bill.

Very soon after the next Congress assembles it will be asked to enact the following bill for the relief of the merchant marine of the United States engaged in the foreign trade:

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled: That on and after the passage of this Act there shall be paid, out of moneys in the Treasury of the United States, not otherwise appropriated, to any vessel, whether sail or steam, built and owned wholly in the United States, engaged in the foreign trade, the sum of 30 cents per registered ton for each 1,000 miles sailed, and *pro rata* for any distance traveled less than 1,000 miles on any voyage or voyages between this and any foreign country or countries, and the measure of distance traveled, and the distance between ports or places in this country, and ports or places in foreign countries, and between one foreign port or place and another foreign port or place, and from any designated point of longitude and latitude to any port or place in this country or any foreign country, shall be determined by measurements which shall be furnished by the United States Hydrographic Office to the Bureau of Navigation, and such payments to any vessel as aforesaid shall be paid on the vessel's arrival at a port of entry in the United States, in accordance with such regulations as the Secretary of the Treasury shall prepare and promulgate.

The payment at the rate of 30 cents per ton for each 1,000 miles sailed as herein

provided to be paid to vessels engaged in the foreign trade shall continue for the term of ten years, and thereafter for another term of nine years at a reduction of 3 cents per ton each year upon each 1,000 miles sailed, and *pro rata* for any less distance traveled.

The MANUFACTURERS' RECORD has several times referred with approval to such efforts as this for the advancement of the merchant marine interests of this country, and early in May gave a full report of the convention of the South Atlantic Department of the American Shipping & Industrial League held the last of April in Charleston. During June other conventions have been held—one at San Francisco, the other at Chicago. These representative bodies have indorsed in the strongest and most unmistakable terms the proposed measure, and have provided for a suitable presentation of their views to the national legislature. In September the department of the North Atlantic coast will meet in Boston, and in November the department of the Gulf will hold its second convention at Birmingham, Ala. It is noteworthy that all these voluntary gatherings have been attended by men engaged in agriculture or manufactures, as well as by merchants, bankers and lawyers. This is evidence that the public mind has been aroused to the importance of re-establishing the American flag on the high seas, and of regaining that foreign carrying trade which the country once enjoyed. It has been tersely and truly said that "trade follows the flag that commands the riches of the world." It was by steadfast adherence to the policy of sustaining at whatever cost its merchant marine that Great Britain became the greatest of maritime nations, and made her merchants princes and her bankers the dictators and controllers of the wealth of the world. The ship builders and ship-owners of that country send their vessels to every port in the world, supplying all merchandise their people need, and carrying away whatever surplus they may have. It is all the same to the British merchant whether his ships return with ivory or spices or dyewoods, with ores or lumber or hides, with sugar, tea or petroleum, with fruits or liquors or rags. He buys of, he sells to all mankind. He has customers everywhere and for everything, and in the transportation of these varied commodities from nation to nation he increases his already enormous wealth. Having secured the destruction of the American merchant marine, which twenty-five years ago was his most formidable competitor, John Bull now carries our surplus breadstuffs, cotton, petroleum, naval stores and other raw materials to whatever peoples need them, and occasionally, when his customers insist upon it, some of our manufactured goods also. But while doing this John the shrewd is keeping a sharp lookout, and when he finds a place in which cotton will grow or petroleum wells flow, he

spends no end of money to get the fields cultivated and the wells bored, so that he may keep down American prices and maintain his control of the world's markets.

The United States is an enormous producer of raw materials, and its manufactures are increasing at a rate that will eventually surpass domestic consumption. Yet the area of virgin soil in our vast domain is far greater than that under cultivation, while our treasures of iron, coal and other materials used in our industries are boundless. To find a market for our surplus crops, and for all the diversified wares produced by our skilled labor, we must no longer trust to luck, nor rely upon John Bull and other foreign carriers. We must send out vessels under the American flag as we once did, and regain our lost prestige as a commercial nation. And the first step in that direction must be the passage by the Congress of the proposed law or some similar measure. It is a realization of this need that induces farmers, manufacturers and merchants to unite with men of all pursuits and all shades of political belief in holding the conventions and adopting the resolutions of the American Industrial and Shipping League.

Progress at Rome, Ga.

ROME, GA., August 17, 1887.

Editor Manufacturers' Record:

The rapid development in this section, so often referred to in your valuable paper, goes on steadily. To-day dirt was broken at Chattanooga on the Chattanooga, Rome & Columbus Railroad. The Rome & Decatur have completed their iron bridge and are running 15 miles out from Rome in the direction of Gadsden, Ala. On the west end of the road about the same distance is completed.

Judge Joel Branham and I will soon be ready to take hold of our iron property in Bartow county, Ga. In this section a number of iron properties have been bought by investors. In the last week I have heard of the following sales in Polk county: James Long, iron ore beds, \$12,000; J. W. & N. Cochran, \$25,000; Wm. Reid, \$12,000. Parties are now examining other ore properties with a view to buying. Work on our new hotel is progressing finely. The Rome Land Co. have bought their dummy engines and cars and are grading five miles of track, besides laying out a park and pleasure grounds at Mobley's Spring. Last week one of our real estate firms sold a number of pieces of city property, and the inquiry is quite active. The Beck Marble Co. are building a railroad to their quarry, seven miles from Rome. Our steamers are doing a heavy business. The locks in the Coosa river are about completed. The MANUFACTURERS' RECORD is very popular with the Rome people. G. M. BATTEY.

Natural Gas Reported in Virginia.

MIDLOTHIAN COLLIERY, VA., Aug. 12, 1887.

Editor Manufacturers' Record:

Seeing as I have seen for successive years blowers of gas like roaring thunder in the deep workings at Midlothian, and knowing as I do that the progenitor of that gas has not been extracted but exists in an immense area of scores of square miles, I have been trying to get bore holes drilled to tap gas and pipe it to Richmond, but I am sorry to say that although as high a pressure of gas and as constant a flow could be tapped here as the gas at Findlay, Ohio, or Pittsburgh, nothing of a definite character has been done here or in this region. I am in hopes, however, that it will be done.

JOB ATKINS, M. E.

CHATTANOOGA, TENN.

A Manufacturing City with a Golden Future.

Pluck and Energy, Diversified Industry and Judicious Investment Build a City as Firm as Lookout Mountain Near By.

[Special correspondence MANUFACTURERS' RECORD.]

CHATTANOOGA, TENN., August 15, 1887.

Whether by comparison of dry statistics or by perusing the more attractive description of recent visitors and writers throughout the South it cannot but be seen that the rapid growth of the Southern States is almost phenomenal in its character. All over the South, not only at the most conspicuous points, where progress is to be chiefly looked for, but in sections of less notoriety, an advance in prosperity and importance is being made. When it is remembered that besides suffering the losses incident to the war, very much of the country is in its primitive and undeveloped state it is evident that the South has made and is making all the progress that could be expected.

Take for instance the city of Chattanooga as an example of the wonderful strides the South is making in building up industrial and commercial centers. Here is a city standing out as a guide post—a veritable land-mark in the progress and development of a young South. An estimate of the remarkable growth of this city can hardly be made, but from the appearance of activity, push and energy to be seen on every hand, it is evident that Chattanooga will not lag behind in the march of progress and development.

After a lapse of nearly six years I return to Chattanooga in order to note the advancement of the city, now attracting the capitalist and investor as well as the manufacturer and home seeker. The transition is wonderful. Capital is asserting itself with remarkable activity. New avenues of trade have sprung up. Increased manufacturing interests appear on every side. Mineral developments assert themselves in prodigious strength. Diversified industry is the keynote of success and prosperity, while the people show by their innate pluck and energy that small industries, home supplies and home production are the means whereby commercial prosperity is to be obtained. Probably in no Southern city is this great truism in political economy more discernible than in the city of Chattanooga. The actual growth from 1860 to 1887 tells the tale in no uncertain manner. In 1860 the assessed value of property was \$1,330,729; in 1887, \$12,000,000. In 1860 the actual capital employed in manufacturing was \$209,300; in 1887 it was \$10,000,000.

To show the enormous developments that have taken place in Chattanooga during the past six years it may not be improper to go into minute detail, even though it may prove weary to the reader. But to all who are interested in the South's growth I venture to say it cannot help but prove interesting and entertaining. One of the special advantages under which Chattanooga is to build up on a broad and firm foundation is its railroad facilities. It is the center and terminus of eight trunk lines:

Cincinnati Southern.....	336 miles
Nashville, Chattanooga & St. Louis.....	321 "
Memphis & Charleston.....	310 "
E. T. V. & Ga. (Alabama Division).....	309 "
E. T. V. & Ga. (Georgia Division).....	431 "
E. T. V. & Ga. (Main Line).....	3 "
Western & Atlantic.....	138 "
Alabama Great Southern.....	491 "

Added to this the other lines under contemplation and now being built, make Chattanooga a railway center second to no other city in the South. Owing to the public spirited policy of the railway officials, and the ardent pulling together of all interested in the growth of the town, the wholesale business has increased 50 per cent. in the past eighteen months, while \$9,500,000

worth of capital has come into the city during the current year. This city claims the distinction of being the largest consumer of raw pig iron in the South. It has a very large Bessemer steel rail mill, while in the Chattanooga iron district there are to be seen twelve blast furnaces, with an annual capacity of 320,000 tons.

It is astonishing to note with what rapidity this city has stepped and moved forward in the grand march of material development. The total number of her factories and industries is 121; total amount of capital invested \$7,774,700; total value of products \$12,550,500; total annual wages \$2,717,300; total hands employed 7,013. It has been ascertained by carefully prepared statistics that the increase of capital in the industries of this city for twelve months amounts to \$1,368,500 or 45 per cent. over last year, while the value of products rolled up \$5,078,700 or 63 per cent.

Nations grow rich, it is said, by means of newly created wealth, while the individual gets rich by the wealth already existing. If such is case, the South is to-day on the sure road of prosperity, for in every community wealth is being created and distributed. The up-shot of this in time will be a general diversity of interests, more manufactures, numberless workshops, home production, home consumption, and the keeping at home our surplus money for improvements in our social and commercial conditions. If this can be brought about the South will become the world's workshop. Until we accepted the protective principle and established it in 1861, England was certainly the world's workshop. The annual income of Great Britain, as shown by the census of 1880, was \$5,780,000,000; the annual income of the United States in the same year was \$7,030,000,000. Surely the finger of nature points to the South, where the most important mechanical developments will occur during the remainder of the present century. Take Chattanooga, Birmingham and Anniston as an exemplification. Is it not patent that these cities are marching on as workshops of this industrial era. Chattanooga lays claim to this progressive step in Southern development. Her present growth sustains the assertion. The various new manufacturing establishments attest her growth; the placement of capital within the city limits bespeak a glowing future; the vast net of her street railways, affording cheap transportation to the mechanic and the laborer, is a happy augury for her future; while the vast forest of virgin growth in close proximity invites capital and industrial enterprises from all parts of the country.

Chattanooga holds out many advantages for the capitalist investor and the settler, chief of which is her peculiar central location with reference to the large territory which can be supplied in all lines of manufacturing and trade of all classes; also the numerous facilities for concentrating all kinds of raw material for manufacturing purposes and the facility for distributing the manufactured articles in every direction.

It is located in the center of a rich iron ore, coal, limestone and timbered country, embracing all kinds of timber, which, with the present facilities of transportation, can be placed in Chattanooga at low rates and small costs.

Chattanooga has now six trunk lines of railways leading in every direction—North, South, East and West—forming a part of the great railroad system of the South, thus enabling her to distribute her productions to any part of the country with equal facility to that of any other city in the South, and in many respects with a much greater advantage than the majority of Southern cities.

The climate invites many who cannot stand the rigors of the extreme cold of the North and West.

The cheapness of living here, being situated in a large agricultural country, where nearly every cereal is grown, is also a very great advantage.

A careful investigation of the numerous enterprises, involving hundreds of thousands of dollars, already located and in successful operation in Chattanooga, will at once demonstrate to capitalists that investments can be made here with absolute safety and security, with a certainty of yielding a profitable return, thus dispensing with the necessity of making an investment as an experiment. To illustrate this fact, there are now in full successful operation in this city over 120 manufacturing establishments of different kinds, representing a capital of \$7,775,000, with an annual product of \$12,550,000. Besides this there is now in course of erection a tool factory, coffin factory, bucket factory and numerous others, while arrangements have been made for removing large mower and reaper works from Ohio. Daily inquiries from various sources from parties desiring to locate, give substantial evidence that Chattanooga is becoming more and more widely known as a safe place for the investment of capital.

In conversing with Mr. D. C. McMillin, Jr., of the well-known real estate firm of Jos. P. McMillin & Co., I learned much of the actual needs of Chattanooga, and it was my good fortune to obtain the following interview from this progressive, wide-awake and intelligent gentleman.

What, in your opinion, are the actual needs of Chattanooga to place her in the front ranks of her sister cities in the present march of material development? inquired the MANUFACTURERS' RECORD representative.

The principle and vital need of Chattanooga is for the moneyed interests of the East and West to realize the many varied and natural advantages of Chattanooga as a manufacturing and business point, and these important facts should be represented in such manner and through such sources that will enable all inquirers to feel that such statements are not made from an advertising point of view, but from a representation of actual, existing facts. Another point is for the people to understand the safety of investments, their constantly increasing value, and the certainty of permanency.

One of the greatest needs of our people is to have a united concert of action among her business men and capitalists, in order to consult, and, in many instances, to do away with the system of cheap, unreliable advertising in the promulgation of the many resources and advantages of the city. An important exigency is for the financial, manufacturing and commercial interests of the country to know and fully realize the numerous advantages Chattanooga holds out as a field for safe and profitable investment. As an instance of a field for profitable investment, there is now in this city one of the largest tanneries in the United States, with a capital of \$500,000, and not a shoe factory in the place. This is only an instance of many that could be recited.

As an inducement to permanent settlers, such as mechanics, skilled artisans and others, sober, steady and industrious workmen, Chattanooga offers employment at good wages. Living is cheap here, and with our grand belt road facilities, cheap homes and cheap living can be obtained. In no other city in the South are the street railway facilities so good as will be found in our city. For five cents the city and suburbs can be reached at any given time during the day up till 10 o'clock at night.

It was the good fortune of your representative to also meet Col. S. B. Lowe, of the firm of Messrs. Lowe & Tucker, in whom Chattanooga has no abler or more conscientious and hard-working citizen.

"What are some of the present wants and needs of Chattanooga by which she may add to her already growing fame as a commercial and manufacturing center?" asked your correspondent of Mr. Lowe.

"What the South should begin to learn is the erection at once of small industries, such as manufactures and workshops, in

order to utilize the raw material where grown, and this is especially applicable to Chattanooga as well as to every other city and town in the South. The great keynote of success for the South is to become self-sustaining, and she can become so if the right course is pursued. Home industries, money kept at our own doors, and self-reliance is the line to work out our industrial progress. Chattanooga must eventually manufacture everything we need. Her central position, together with her wonderful advantages, will enable her to do this. We need here iron works of all kinds and descriptions, a shear and scissor factory, nut and bolt works, wagon factories, boot and shoe factory, and other industries, which could be made to pay at once. The saving of time in transportation, tremendous freight bills, and the cost of the raw material in themselves, ensure success in the establishment of any of the above enterprises. The continued growth of Chattanooga from year to year bears me out in my remarks. Hardly any manufactory which has been started here, and managed with any degree of enterprise, but what has paid. Our location and natural advantages are coming to the front every day. We are a distributing center, hence any new industry will pay, especially for the manufacture of the raw material in our midst."

On a thorough inspection of Chattanooga, driving over the entire city and suburbs, it was astonishing to note the growth of the place. It is phenomenal, far greater than any statistics of trade and population have yet shown, and there is every reason to believe that it will continue to grow. The only thing retarding the growth is the timidity of the people about investing in public improvements, such as pavements, drives, parks and fountains, a judicious outlay in which would still further enhance the value of property and grapple the great tide of travel and capital which might possibly pass by.

It has not been many years since this city began to assume its present importance, but when trade and traffic commenced to revive it soon took the lead. How wonderful the transformation, and how surpassing the growth! The question naturally arises what has been the cause of this rapid and steady growth. Here are a few reasons:

Chattanooga is a healthy city.

The people are intelligent and progressive. Home matters are the first consideration. Capital is always employed to encourage home industries.

The cost of living is comparatively cheap. There exists great inducements for capital and energy.

The school facilities are unsurpassed.

The section has a fertile soil and delightful climate.

The mineral wealth is unlimited in quantity and variety.

NOTES BY THE WAY.

The Chattanooga & Lookout Mountain Railway, C. E. James, president, and W. O. Peoples, secretary and treasurer, will be another step in the right direction when the plans of this company are fully consummated. It is proposed to have a broad gauge line from the passenger depot in the city to the top of the mountain, a distance of eight miles, which, when completed, will cost over \$200,000. Five hundred hands are now employed on the work, which will probably be completed by the first of February. This will be a delightful trip for strangers visiting the city, and who are also desirous of visiting the points of historical interest on grim old Lookout.

The Lookout Mountain Co., E. Watkins, president, and J. P. Hoskins, secretary and treasurer, propose to convert Lookout Mountain into a delightful mound of pleasant, comfortable and enjoyable summer homes; also a winter sanitarium during the frosty months. On the historical point the company propose making a park which will cover nearly 20 acres. To the entrance of

this magnificent outlook will be built a \$100,000 hotel with all the modern improvements and conveniences, which will be ready for next summer's travel. It is to be doubted whether there is a more magnificent view to be obtained of hill and dale, valley and mountains, than is to be secured from the point where the new hotel is being erected. Of course there are more extended views from points in the State, but for picturesque beauty of landscape and loveliness, there is probably no place which offers more to the lover of nature than this spot, where next year will be a magnificent hotel. There are over 730 acres of land on the mountain in the hands of this company, who propose to divide it off into lots for residences. Here will be offered summer residences at the very doors of the people of Chattanooga, and, for that matter, for many others outside the State. This will be a most excellent project when carried out, and shows the characteristic energy and foresight of the people who inaugurated the scheme.

The East End Land Co., of which Chas. A. Lyerly is president, own and control 1,000 acres of land in the eastern suburbs of the city. The object of the company is to supply pleasant, healthy and cheap homes for the people, as well as manufacturing sites for all kinds of factories. The company propose to donate land to any factory. The great mower and reaper works already mentioned are to be located on the property of this company. It will pay well for manufacturers to investigate this very desirable location before investing elsewhere.

The Chattanooga Paint Co., S. B. Lowe, manager, is one of the remarkable industries of Chattanooga. During the war Mr. Lowe conceived and originated the idea of making paint out of fossiliferous ore. Having thoroughly studied the matter and tested it to his satisfaction he materialized his plans by starting a factory in 1880 for the manufacture of this article. The works are situated on Missionary avenue on the line of the belt road. The capacity is 20 tons per day, and so general has become the use of the paint that it is impossible to keep up with the orders. This paint contains 55 per cent. of metallic iron, which makes it more durable than other paints, and in consequence of which it is largely used by masons in their mortar; being of a reddish hue it corresponds with the brick work and takes the place of the more expensive venetian red. Contractors and builders should make a note of this fact.

The Palace Hotel, mine host Herr Voigt, proprietor, is a new departure for Chattanooga. Such a hostelry was needed. The exigencies of the times demanded it—hence Chattanooga can now boast of one of the finest hotels in the South. Built and furnished upon the most improved style of architecture it is a pride to the city. The building is four stories high with basement, and has an imposing appearance. The whole building is heated by steam, and is well ventilated. The rooms are delightful nooks of repose, while the table will please the most fastidious epicure. Mr. John B. Connor is the chief clerk; affable and pleasant he has made an enviable reputation for himself with the stranger in the stranger's gates.

W. T. Rogers, traveling passenger agent for the Nashville, Chattanooga & St. Louis Railroad and the publisher of "The Guide," is one railroad man out of a thousand. Mr. Rogers leaves nothing undone to serve the traveler over his road. Always on the alert and indefatigable in his work, no stranger arriving in the city will be left uncared for by this accommodating official. A great many railroad officials might take lesson from Rogers and thereby secure much for themselves and the lines they represent.

If I mistake not the day is close at hand when Chattanooga will not only be known to the world at large as one of the greatest manufacturing cities in the South, but also as one of the most progressive and energetic in the galaxy of all the States.

HINTON A. HELPER.

A Gathering of Farmers.

[Special correspondence MANUFACTURERS' RECORD.]

CHARLOTTE, N. C., August 13, 1887.

The farmers' assemblage at Mount Holly, of which the MANUFACTURERS' RECORD made kindly editorial mention a week or two since, has occupied the attention of the people of this vicinity for the past four days, and has been heralded by the Associated Press and by special correspondents. It deserved all the attention it had and more, for it was both a novelty and a success. It is the first time in the history of American agriculture that an assemblage of farmers in a little country place has awakened such wide spread interest. But there was good reason for this, for in this bold attempt to make a school of practical instruction for farmers which they could attend with their families, and to have that so conducted that none would weary of it, but gain rest and recreation as well as knowledge, a movement was recognized that, if successful, would be most beneficial to all; hence, the general interest. I do not mean to be understood that there never was a grange encampment, for there have been many, nor that farmers' institutes are novelties. It was the happy blending of all in one, the cession of fun, recreation, rest and instruction that excited interest and inquiry. If it could be demonstrated that an assembly of farmers could be held together for a week for these purposes, that the general methods employed by the Chatauguans could be made successful, then indeed new life would be imparted to agriculture. The novel experiment has been made. Its most sanguine projectors were astonished at its success. The association formed for the occasion will be a permanent organization, and in another year the attendance will be far greater than it was this week.

Mount Holly is a lovely site for a great town. It is now a little cross-road community of scattered stores and dwellings. One hotel, so called, opposite the railroad station, a meeting-house in the upper village, fields of cotton and corn, pastures, groves—these are the things the stranger first notes when he steps from the railroad train. But there is much more to Mount Holly. The Catawba river, breaking here an immense bend, separates Gaston from Mecklenburg county. On that stream and its tributaries are as fine water-powers as could be desired, most of them going to waste. Within a radius of six miles are several cotton mill villages, where numbers of people live by the employment these mills afford them. These several establishments will be the subject of a future letter. The land is high and rolling. The scenery is beautiful, the soil fertile, the climate salubrious. It is one of the most attractive and desirable locations of the Piedmont part of North Carolina. The price of farm lands is low, and any desired number of acres can be had. There are ledges of fine gray granite in this immediate vicinity, in one of which a quarry has been opened. Timber for spokes, shuttles, tool handles, furniture and building abounds. This should be a great place for manufactures of woodenwares. In the country back of it are enough red and chestnut oak to furnish bark for many years to a tannery as large as that at Chattanooga. In Gaston and the counties around it cotton enough is grown to supply all the mills of Massachusetts. The Carolina Central Railroad runs through this region. A few miles distant is the Air Line road. Transportation is, therefore, already provided. By rail Mount Holly is but ten miles from Charlotte, which is already a very considerable railroad center. With all these advantages, added to the great amount of water-power that can be utilized at comparatively little cost, why is not Mount Holly a great, thriving town instead of a petty cross-road village? The first and chief reason is that it has no hotel. The place called by that name does not deserve it. Many who have gone there to

stop for a short time and look about have packed their gripsacks after a day's experience and gone to seek more desirable quarters. But there will be something better just as soon as the advantages of the place are known, for the owners of land near the depot will cheerfully give as much as may be needed to any person who will put up a hotel to accommodate 100 guests and agree to keep it in first-class style. Nor is there any doubt about patronage for such a house. It would be filled with guests from October to June, because of the delightful winter climate and the fine shooting grounds of this county.

Mount Holly for the past five days has been the liveliest place in North Carolina. Crowds have come by excursion trains, by wagons, on horseback and afoot. All ages, sexes and conditions have made up the motley assemblage. More than thirty speeches have been made on subjects appertaining to agriculture. There have been athletic sports for the young people, a military parade, a tournament, baseball games, a cattle show, an excellent though not extensive display of farm and garden products, exhibits of agricultural machines, the usual number of side shows, and all other concomitants of bacolic gatherings except horse racing and gambling. But the chief charm of the week, and the greatest for good, was the social life. In the canopied wagons, the tents, the bought huts and other improvised shelters were families of as stalwart men, lovely women and bright, healthy children as can be found in the world. These people, coming from far and near, met in good social style, shared each other's provisions, enjoyed the frolics and sports of the occasion, listened to the speeches and discussed them afterwards. For the time being they had left the old rut of daily routine, and happy in themselves and their associates, they were gaining every hour new ideas of value while storing up fresh energies for their future work. One thing that more than all else drives young America from the healthful farm to the crowded town is the isolation of his life. His chances for social enjoyment are few. From spring to fall he rises and retires with the sun and works hard all day. The grange was founded in part to meet his social longings. A great encampment such as this has been every year would give him pleasant anticipations, something to look forward to, and to make preparations for from January to mid-summer. It will be one of the helps of his life. Two wonderful exhibits this week deserve special mention. One was the superior carpeting made from pine needles by the Acme Fibre Company, of Wilmington. Their improvement in preparing and weaving this material into floor coverings was quite evident in their fabrics on exhibition. The other was a display of grains and grasses from Buncombe county. Captain Natt Atkinson, of Asheville, whose zeal for "the land of the sky" has been unabated through years of hard work, secured this fine collection of a hundred sheaves of wheat, rye, oats, timothy, red top and various other cereals and grasses. They were object lessons of great value, for they showed what the lands of the trans-montane and the Piedmont counties will produce when tilled as they should be. His speech on the text they suggested was greatly enjoyed.

Coming to Charlotte from Mount Holly I stopped for the first time at the Buford Hotel, and was surprised to find it the most quietly, elegant and comfortable of any I have ever been in south of the Potomac. Its owners, Messrs. Miller and Johnson, have spared no expense in fitting and furnishing it, and in providing for the comfort of its guests. It is the coolest house for a hot day to be found in a Southern city, and the same heavy walls that make it so will make it a warm and comfortable winter abode. These gentlemen have recently secured the services of Mr. Conrad Lipscombe, long the popular clerk of the Central in this city, a deserved favorite with the traveling public.

B. S. P.

Orlando's Prosperity.

ORLANDO, FLA., August 20, 1887.

Editor MANUFACTURERS' RECORD:

Messrs. Herdic & Co., of Pennsylvania, have recently put in a water-works plant at a cost of about \$70,000. The city made a contract with them for 75 plugs, and the citizens are availing themselves of this source of water supply instead of depending upon wells.

The gas works are nearly completed. The company hopes to be able to fill up during the present month. The gas company has absorbed the franchise of the electric light company, and will probably add electric lighting to their plant during the coming fall months.

Stock for a second national bank has all been taken, and organization will be effected within the next two weeks.

The new hotel erected by H. S. Kedney is almost finished. Two weeks more with the carpenters and painters and the house will be ready for the furniture; cost of building \$42,000.

Geo. E. Macy, of the Macy Wagon Works, is adding a bone mill to his plant for the purpose of grinding bones for fertilizers. There is plenty of raw material here for him to work up.

The Kuhl-De Laney block is almost completed. It is a beautiful and substantial structure. The Knights of Pythias will have a lodge room in the third story.

A. W. Barber is putting up a building and arranging for the manufacture of artificial stone.

Orlando is making rapid progress. Since the present year began she has secured her first street railway, and now has two miles of track in successful operation; a system of water works equal to that of any city of the same size in the South; gas works erected on a scale which anticipated the wants of a large city, with electric lights to be added; completed seven brick blocks—one of them a hotel—besides a large number of wooden residences of a good class.

A tannery, a boot and shoe manufactory to work up the product and a paper mill are needed here. A cold storage warehouse to store fruits and vegetables would do well.

At Longwood, not far from Orlando, Geo. W. Moyers has just erected a large saw mill and wood-working establishment. The plant contains saw, shingle and planing mills. Stair building, mantles, inside finishings, side-boards, etc., will be among the specialties of this establishment. A skillful architect is connected with the plant, and designs and estimates will be furnished and contracts entered into for erecting buildings complete of any style or size desired. Most of the work to be done within the shops and transported ready for putting together.

The Abendroth & Root Safety Boiler.

The accompanying illustrations show the Abendroth & Root Safety Boiler. This boiler is not only non-explosive, but the same peculiarities which make it so also conduce to economy of working, on account of the sub-division of the water into small masses, freedom of circulation, and large heating surface. Cheapness of construction and facility of repair follow from the use of straight tubing only in its construction.

The boiler proper is inclosed in a fire chamber over a grate. This chamber is conveniently made of brick, with iron front and cleaning doors. A rack of small tubes, four inches in diameter, is supported in an inclined position, and constitutes the steam generating portion. The tubes are connected continuously throughout by return bends, held in place by bolts and nuts. Feed water enters at the lower and rearward end of the boiler into a transverse pipe, connecting with the tubes, that acts as mud drum for the collection of any sediment that may form. The upper and forward end of the rack of tubes connects with larger horizontal pipes. These run back through the upper part of the fire chamber, and at the rear have

two connections. One is with the rear of the tubes by means of several up-takes, one for each horizontal pipe. The other is with a horizontal transverse pipe, which acts as steam dome. To it the steam pipe is connected.

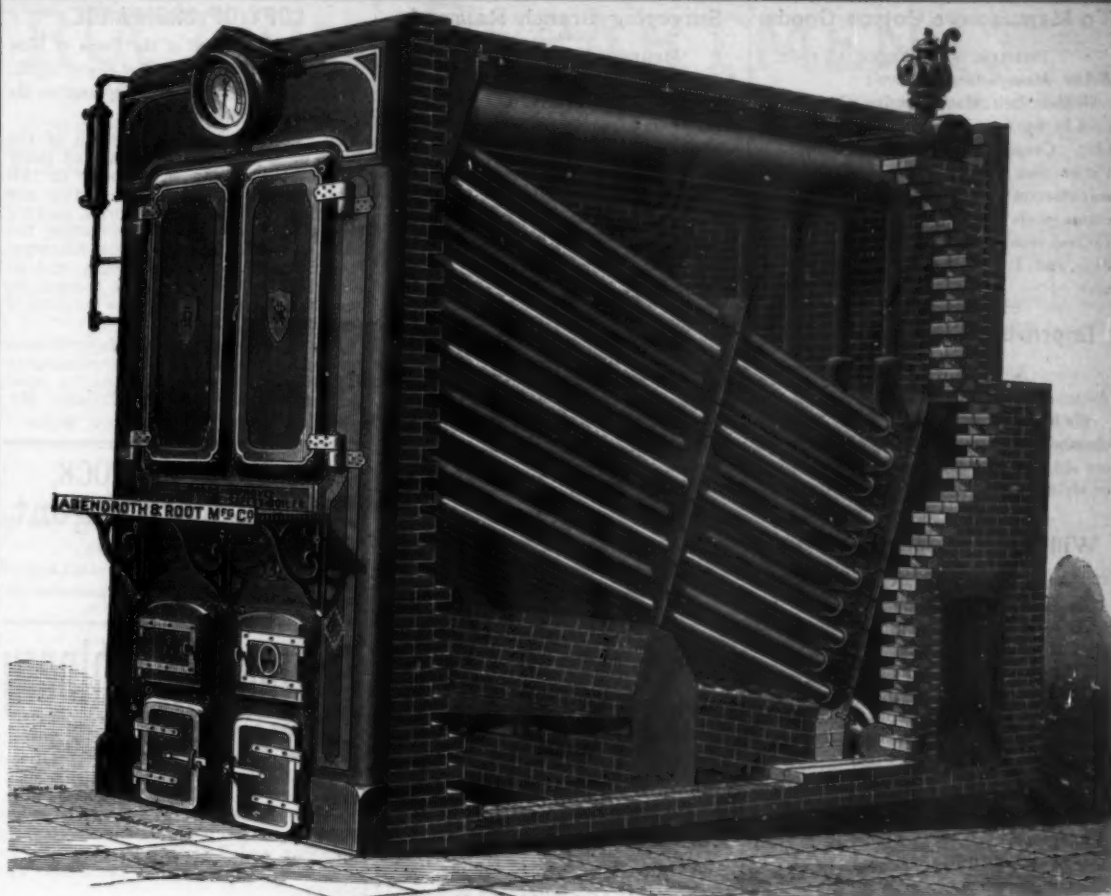
The steam connections for both steam gauges and water column are taken from the front end of one of the large pipes. The water connection for the water column is taken from one of the down-takes at the rear of the boiler.

These connections, and also that for feed water and steam, are shown in the longitudinal view, partly in dotted lines.

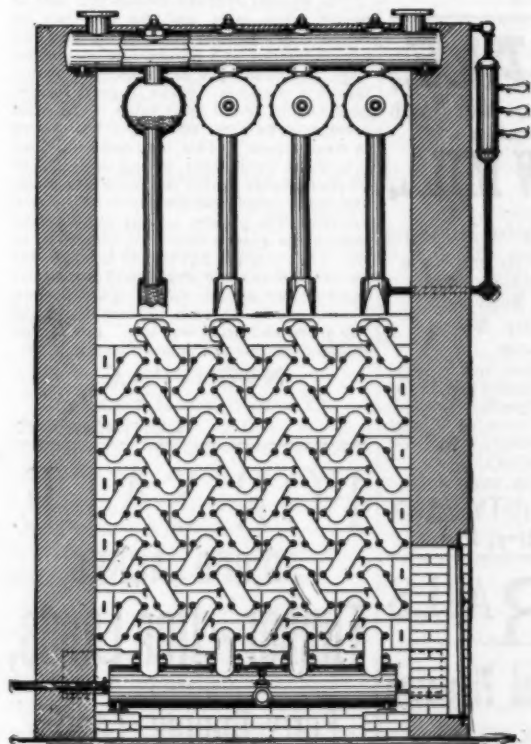
The position of the different doors is clearly shown, and illustrates the ease of access for purposes of cleaning. Independent of the convex shape of the heating surface, that cannot retain flue dust, the accessibility of all parts, makes the cleaning a simple matter. The methods of support at front and rear are cast-iron beams with intermediate bridge wall blocks, for disseminating the heat, which can be seen in the same view.

The tubes are arranged alternately, as shown in the rear elevation and in the small cut of details. This favors a more thorough mixing of the products of combustion and absorption of heat. Were the series of tubes arranged vertically above each other the gases from the fire would have unobstructed channels through which to pass. As it is, in the actual construction, the currents are continually broken up by meeting new tubes, so that their heat is most effectually taken from them.

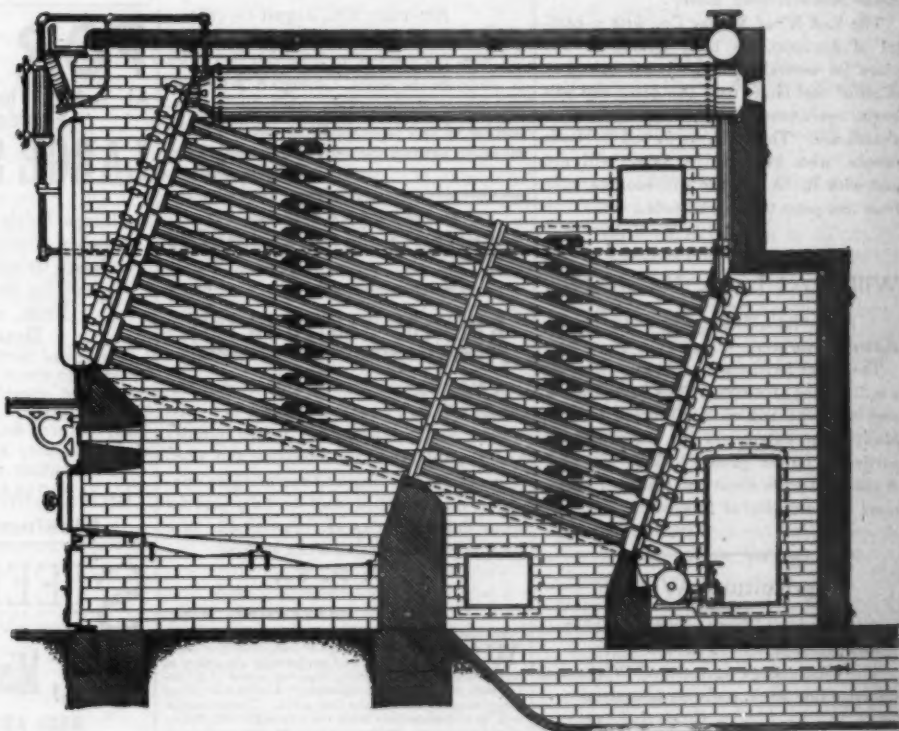
The claims to safety in this boiler rest on the strength of tubes and on the fact that under heavy pressure they do not tend



THE ABENDROTH & ROOT SAFETY BOILER.



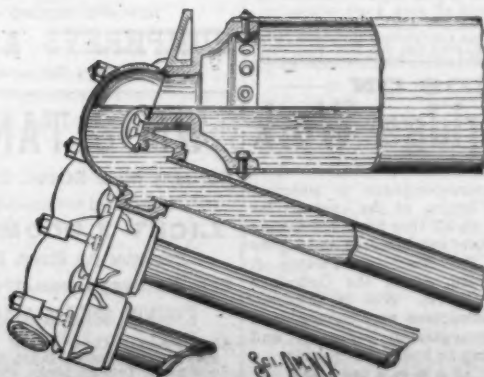
END VIEW OF REAR OF BOILER.



LONGITUDINAL VIEW OF BOILER AND SECTION OF SETTING.

to actually explode. Little more than a rupture can happen. Even if a tube exploded it could do no harm to life or property, the accident would be so local and slight in amount.

The facility of repairs is also to be noticed. To replace a tube after the fire is drawn and the boiler is empty, all that is necessary is to remove two return bends at the rear and two corresponding ones at the front, when the injured tube with its companion can be pushed out of the front door. Then a new pipe can be inserted, the whole being the operation of only a few minutes. Even drawing the fire is not absolutely necessary for this operation. Its heat can be reduced sufficiently by banking. As all the work is done from the outside, the gases



END TUBE CONNECTIONS.

from the banked fire will do no injury to the workmen. Thus almost all necessity for specially skilled labor is avoided. The repairs are a matter to be executed by a machinist. The boiler-maker is never required. The relative sizes of pipes are illustrated in the cuts. The boiler there shown is supposed to have four inch pipes in its rack, with fourteen inch horizontal pipes. These boilers are used in some instances under a steam pressure of 250 pounds to the square inch, thus demonstrating their absolute safety, and are giving most satisfactory results. They are also in extensive use in this and other countries.

Manufactured by the Abendroth & Root Manufacturing Co., No. 23 Cliff street, New York.

To Manufacture Cotton Goods.

DURHAM, N. C., August 19, 1887.
Editor Manufacturers' Record:
 Golden Belt Manufacturing Co., capital paid in \$50,000, was organized August 16, 1887. Corporators are Julian S. Carr, T. B. Fuller and Mrs. Nannie G. Carr. Will manufacture corn sacks, tobacco sacks and cotton goods generally. Capacity at present 125,000 sacks per day. J. S. Carr is president, and T. B. Fuller, secretary and treasurer.
 T. B. FULLER.

Improving Chemical Works.

AUGUSTA, GA., August 17, 1887.
Editor Manufacturers' Record:
 We have just finished an addition to our chambers and are now engaged in replacing our old set with the latest and most improved style.
 GEORGIA CHEMICAL WORKS.

Will Enlarge Electric Plant.

NASHVILLE, TENN., August 19, 1887.
Editor Manufacturers' Record:
 We are going to put in a Westinghouse alternating system for long distance incandescent lighting. It will be a 650-light machine and is to be in running order October 1. We have secured the services of Jas. Wills, formerly of Auburn, N. Y., as general manager and electrician, and expect to crowd business. He is having the large Cummer engine rebuilt and building a new switch-board.
 THE BRUSH ELECTRIC & POWER CO.

To Develop Coal Lands.

PARIS, TEXAS, August 17, 1887.
Editor Manufacturers' Record:
 The Red River Mining Co., with a capital of \$500,000, has been formed at this place for several months. It has leased 15 miles of coal lands near this place and will begin operations soon. There is coal in abundance. The stock is owned by Paris people, who, knowing its value, will not part with it. A railroad will soon be built from this point to the coal fields.
 P. W. HARRISON.

Will Erect Large Marble Mill.

KNOXVILLE, TENN., August 19, 1887.
Editor Manufacturers' Record:
 The Great Southern Marble Co. will erect a mill to cost \$100,000. They have already secured a site and work will begin at once. Many other enterprises are talked of, and parties are on the ground looking for sites. A soap factory is about ready to start operations with a capital of \$100,000.
 JNO. M. BROOKS.

Agricultural Works.

CHATTANOOGA, TENN., August 17, 1887.
Editor Manufacturers' Record:
 The Chattanooga Agricultural Works will organize this week, probably to-morrow.
 CHAS. A. LYERLY.

HOUSTON, TEXAS, August 18, 1887.
Editor Manufacturers' Record:
 The Houston Building Co. has been chartered and we commence operations soon as factory can be made ready.
 E. L. DENNIS, Secretary.

LYNCHBURG, VA., August 17, 1887.
Editor Manufacturers' Record:
 We are going to erect our building; will cost us between \$5,000 and \$7,000. Plans have been drawn and are in the hands of bidders.
 A. PRIDE.

BIRMINGHAM, ALA., August 20, 1887.
Editor Manufacturers' Record:
 We have formed a construction company called the Alabama Construction Co.
 ROBT. JEMISON.

Surveying Branch Railroad.

MEMPHIS, TENN., August 16, 1887.
Editor Manufacturers' Record:
 The branch from Centerville to Woodville, Miss., is proposed by our company and we now have engineers surveying the route, but I am unable to state at this time when we will commence construction.
 LOUISVILLE, NEW ORLEANS & TEXAS R. R.
 J. M. EDWARDS, Vice-Prest. and Gen. Man.

Will Build a Cotton Mill.

GRAHAM, N. C., August 18, 1887.
Editor Manufacturers' Record:
 The Big Falls Cotton Mills Co. will build a cotton mill at Big Falls, in Alamance county.
 J. V. POMEROY.

Contemplating Adding Foundry.

CATLETTSBURG, KY., August 16, 1887.
Editor Manufacturers' Record:
 I have closed the contract to-day for engines and boilers for two new steamers to ply on the Sandy river, of which Catlettsburg is the outlet. I am contemplating adding a foundry to my works shortly, and would like for builders of foundry cupolas to send me circulars.
 HARLAN P. WELMAN.

Will Rebuild Planing Mill.

MACON, GA., August 17, 1887.
Editor Manufacturers' Record:
 We will resume business at the Collins Manufacturing Co's works until such time as we can rebuild our planing mill and box factory.
 W. H. MOXLEY & CO.

NEWPORT, KY., August 16, 1887.
Editor Manufacturers' Record:
 I have the contract to lay about two miles of track for the South Covington & Cincinnati Street Railway Co., this being for extension of two separate lines, one being the Madison avenue the other the Austinburg.
 A. S. MORTON.

C. R. MAKEPEACE & CO.
 ARCHITECTS and MILL ENGINEERS
 PROVIDENCE, R. I. Plans, Specifications and Estimates furnished for Cotton and Woolen Mills.

ANSWERS WANTED TO THIS.

A New England Cotton Spinner and Engineer will take a limited interest in a good Cotton Mill in the South of 10,000 spindles and upwards, and take operative and advisory charge, building and operating on condition that the Mill shall be fully paid for when done and running. Parties who have Cash to put into business can address

J. P. T.,
 Care MANUFACTURERS' RECORD,
 BALTIMORE, MD.

WANTED—A thoroughly competent and energetic man capable of performing the duties of Superintendent or Assistant Superintendent of a Cotton Mill of about 20,000 Spindles. Must have recent experience in mills of the best class. Compensation will be commensurate with the character and ability of the applicant. References must be unexceptionable and ability first-class. A competent Overseer and Second Hand for each, Weaving, plain and fancy, Carding, Spinning, Spooling, Twisting, &c., can also make as engagement at good wages if character and reputation and result of work prove satisfactory. Thorough capacity required. Correspondence private. Address, stating terms and previous experience, with references, LENOX, P. O. Box 672, New York City.

**BIDS ON
Iron Bridge Work
SOLICITED.**

Immediate correspondence is solicited concerning the letting of the contract for the building of an all Iron Standard Gauge Draw Bridge about one hundred and eighty feet long, for the Americus, Preston & Lumpkin Railroad, across the Ocmulgee river at Abbeville, Ga. Bids on substructure and superstructure may be made in conjunction or separately. Profiles and specifications may be had by addressing
 B. H. HARDAWAY,
 Chief Engineer, Americus, Ga.

COPY OF ORDINANCE

Passed by the Council of the Town of West Point, Virginia, on the 21st day of April, 1879, and re-enacted and approved on the 22d day of March, 1887.

Be it ordained by the Council of the Town of West Point, Va., that any party or parties investing in property in this town for the purpose of conducting any enterprise, such as manufactories, packing houses, &c., and actually operating the same, they shall be exempt from all corporation taxes upon such property, and all machinery and improvements thereon, for the term of ten years from the purchase of such property.

It is also ordered that the Mayor is hereby instructed to advertise this ordinance in the "MANUFACTURERS' RECORD," a paper published in the City of Baltimore, Md.
 E. WILKINSON, Mayor.

D. W. K. PEACOCK,
 Real Estate Agent,
 CARTERSVILLE, GA.
 Minerals a Specialty.

Refers to THE HOWARD BANK, Cartersville, Ga.
 J. W. RANKIN, Atlanta, Ga.

**Cotton Machinery
FOR SALE.**

The Machinery of a 6,000 Spindle Spinning Mill, consisting of Openers, Cards, Railway Heads and Troughs, Drawing Frames, Slubbing Intermediate, Roving, Spinning and Twisting Frames. All in first-class condition. For particulars apply to

PAWTUCKET THREAD CO.
 PROVIDENCE, R. I.
 Or to C. R. MAKEPEACE, Mill Engineer,
 Providence, R. I.

**FOR SALE,
At Acton, Florida, on the South
Florida Railroad, a
LARGE SAW MILL,**

WITH
 Buildings, Boiler and Engines, Planer and Matcher, (Double Surface,) Rip Saw, Emery Grinding Machine, Band and Jig Saw, Log Hoist and Drum, and Pump for Elevating Water.

The entire outfit complete and in good order, with about two thousand logs in the boom and considerable lumber in yard. Mill is situated on the shore of a large lake, in a well wooded country. Will sell entire property for \$6,000.

For further particulars, apply to
 The KISSIMMEE CITY BANK
 Kissimmee City, Fla.

**STEEL RAILS
COMPLETE OUT-FIT FOR
Logging, Mining and Plantation**

RAIL AND TRAM ROADS.
 Light Sections Rails and Spikes in stock.
 Locomotives, Logging Cars, etc.
 NEW AND SECOND HAND.
 HUMPHREYS & SAYCE,
 OFFICE NO. 1 BROADWAY, N. Y.

WM. E. TANNER,
 No. 1415 Main Street, Richmond, Va.
 Is prepared to furnish promptly
 LIGHT LOCOMOTIVES,
 Dummies for Street Railroads,
 Pole Railway Locomotives and Cars,
 ENGINES, BOILERS, & SAW MILLS.
 Also, Freight Cars, of all styles, Railroad Spikes, Fish Plates, Bolts, Car Axles, Car Wheels, Trucks, Links, Pins, and other Car Forgings, Bar Iron, Steel Horse Shoes.

FOR SALE.

20,000 ACRES
 Timber, Coal & Iron Lands

LOCATED IN
 FRANKLIN COUNTY, TENN.,

Near the North Alabama State line, and on the main trunk of the Nashville & Chattanooga Railroad, 100 miles from Nashville, 12 miles from Stevenson and junction of this railroad with the Memphis & Charleston, 27 miles from South Pittsburg, 50 miles from Chattanooga, 10 miles from Cowen, 15 miles from Sewanee, the University of the South.

These lands are surrounded on all sides by iron furnaces and large coal and iron consuming centers. The location is in the midst of the Cumberland Mountains; good average soil, splendid scenery, pure air, good health, and every variety of mineral waters. The forest consists of Pine, Poplar, Oak, Ash, Chestnut, Hickory, Cherry, Black Walnut, and generally every variety of hardwood common to this country, very large, valuable, and in great quantity. The iron ores of brown hematite assaying above fifty per cent. of pure metal are apparently inexhaustible in quantity. The coal consists of three separate and distinct measures: 1st vein, top $4\frac{1}{2}$ to 5 feet, hard grate; 2d vein or middle, $3\frac{1}{2}$ to 4 feet, good gas, coking and grate; the 3d vein and lower, 3 to 4 feet, and superior to either of the above, approximating the anthracite. These coals are seen cropping out all over these lands, and in places much thicker, but have not been developed sufficiently to state specifically their great extent or valuable properties, except to say that the quality is apparently everything desired, and the quantity practically unlimited.

The present railroad divides this land in nearly equal parts, and the coal can be reached by a branch road within one and one-half miles, and no obstructions in the way. Splendid sites for furnaces or manufacturing purposes. Stone in great variety, good quality and of great value. The exact acreage to be ascertained by a new survey or measurement. This land can be divided into about equal parts, giving to each half all the minerals, timber and facilities needed, and will be sold and divided in this way if desired. The present owners will take and reserve one quarter interest if allowed to do so. This property has only to be examined by an expert, and its present and prospective money value approximated. Title perfect. Terms, one-fourth cash, balance in one and two years, and price very low. For further information and particulars address

NASHVILLE,
 CARE MANUFACTURERS' RECORD,
 BALTIMORE, MD.

FOR SALE.

30,000 ACRES
 Timber & Iron Lands,

LOCATED IN
 Perry County, Tenn.,

On the waters of the Tennessee and Buffalo rivers, about sixty miles west from Nashville, and on the projected Midland and Ohio Valley Railroads. The Midland is now under contract from Memphis to the Tennessee river, 135 miles, and will in the next twelve months reach Nashville. The land is of average soil and quality. The timber is mainly Poplar, White, Black and Mountain Oak, Ash, Hickory, and in fact all varieties of hardwood. The iron ores of brown hematite are found in large abundance all over these lands. Both the timber and iron can be reduced on the spot and shipped in every direction by water or rail, or in the raw state to large consumptive markets. Title perfect. Terms, one-third cash, balance in one and two years. The exact acreage to be ascertained by a new survey or measurement. Thorough examinations solicited. Address

NASHVILLE,
 CARE MANUFACTURERS' RECORD,
 BALTIMORE, MD.

CONSTRUCTION DEPARTMENT

WE PUBLISH, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.

ALABAMA.

Alpine.—The report lately referred to that V. M. McClatchy will build electric light works is not true.

Anniston.—Bids for erecting a school building will be received until August 30 by W. H. Jeffers, city clerk.

Anniston.—Major Constantine contemplates erecting three buildings on Noble street.

Anniston.—Four houses will be erected by the Woodstock Iron & Steel Co.

Anniston.—The Anniston Street Railway Co., previously reported, will build a dummy railroad. Will shortly advertise for bids for its construction.

Anniston.—W. W. McAfee has received the contract to build the addition, 100x106 feet, to the warehouse of Comer & Trapp, previously mentioned.

Anniston.—W. L. Hill contemplates erecting a three-story brick building on Noble street.

Anniston.—Edward A. Oldham will probably organize a \$20,000 stock company to manufacture road carts. Wants to correspond with a practical buggy maker with small capital.

Anniston.—Mr. Samuel Noble will, it is stated, build 20 dwelling houses.

Birmingham.—William M. Lindsay and Thomas W. Walsh have incorporated the Lindsay Furniture & Carpet Co. to sell furniture and carpets, manufacture furniture, etc. The capital stock is \$50,000.

Birmingham.—The Alabama Great Southern Railroad Co. have prepared plans for their new machine shops, previously reported.

Birmingham.—Eugene Lafferty has ordered machinery to start the brick works reported last week. Has secured a site.

Birmingham.—The Henderson Steel & Manufacturing Co., reported last week, will locate their plant at North Birmingham. Buildings will be constructed at once.

Birmingham.—Worthington & De Bardeleben have contracted to build 14 miles of the extension of the Birmingham Mineral Railroad.

Birmingham.—It is reported that G. T. Copennig has contracted to build 60 miles of the Mobile & Birmingham Railroad, previously reported.

Birmingham.—The Woodlawn Cemetery Co., capital stock \$100,000, has been organized with E. Erswell as president.

Birmingham.—Plans are being prepared for the Catholic church previously reported. James O'Connor can give particulars.

Birmingham.—B. F. Roden, W. H. Morris and Robert Jemison have incorporated the Alabama Construction Co., capital stock \$50,000, to build railroads, canals, etc., and to purchase and improve property.

Birmingham.—The Pioneer Glass Co., capital stock \$20,000, has been chartered by H. C. Ulrich, R. Warnock and M. Sloss. Will erect works at once to manufacture glassware of all kinds. The daily capacity will be 50,000 pounds.

Birmingham.—The Board of Education will advertise for new proposals for erecting the large school building previously reported.

Birmingham.—Bids for erecting the courthouse previously reported will be received until September 12 by M. T. Porter. The cost will be about \$225,000.

Birmingham.—E. B. Popejoy has received the contract to build 50 miles of railroad in Arkansas.

Birmingham.—Parker Bros., of Augusta, Ga., will start a brick yard.

Bloonsville.—A saw mill is being erected by A. O. Dickson.

Clayton.—Proposals for building the extension of the Eufaula & Clayton Railroad from Clayton to Ozark, about 40 miles, will be received until August 31 by M. S. Belknap, Savannah, Ga.

Cropwell.—E. P. Chandler will erect the saw and planing mill previously reported.

Decatur.—Bids for digging a trench 4,000 feet long by from 13 to 27 feet deep and a trench 6,000 feet long by 7 feet deep will be received until August 29 by the Decatur Land, Improvement & Furnace Co.

Decatur.—The Decatur Wheelbarrow Co. are building an addition to their factory.

Decatur.—The Decatur Iron Bridge & Construction Co. have received the contract to build three iron bridges in Giles county.

Edwardsville.—It is reported that the East Alabama Mining Co., capital stock \$1,000,000, has been incorporated.

Florence.—The Florence Southern Charcoal Co. has been organized with W. J. Wood and L. Howell, of Indianapolis, Ind.; A. F. Rogers, of Guthrie, Ky., and others as directors.

Hartselle.—The Alabama Asphalt Co., previously reported, have commenced drilling wells.

Huntsville.—A company will probably be formed to bore for oil and gas.

Huntsville.—It is reported that W. P. Wayne, of Birmingham, and others will form a company to manufacture wire goods, etc.

Jackson's Gap.—The Alabama King Mining Co., previously reported, are erecting a ten-stamp mill and other machinery.

Mobile.—Taylor & Watson have received the contract to build 2½ miles of the Mobile & Dauphin Island Railroad; Lathrop & Smith the contract for 4 miles and Mr. Richardson the contract for 2 miles.

Mobile.—The City Railroad Co. have let the contract for a new stable to cost about \$12,000 to B. Sossman.

Mobile.—The Sullivan Timber Co. are improving their mill and adding new machinery.

Mobile.—The Mobile, Hattiesburg & Jackson Railroad Co. has been chartered to build from Mobile to Jackson, Miss.

Mobile.—R. S. Masterton & Co., of New York, will probably erect a large stave and barrel factory.

Montgomery.—A company will probably be incorporated soon to build the railroad to Camden referred to last week.

Russellville.—F. C. Finch is opening iron ore mines.

Selma.—The Selma Land, Improvement & Furnace Co. will donate \$50,000 towards building the Selma & Cahaba Valley Railroad, previously reported. This, with \$50,000 to be raised by citizens, will, it is claimed, insure the early construction of the road.

Selma.—The East Tennessee, Virginia & Georgia Railroad Co. will put about \$7,000 of new machinery in their machine shops.

Sheffield.—C. H. Vorhees is erecting a brick building to be used for manufacturing tin, sheet iron and cornice work.

Sheffield.—A brick yard will be started.

Stevenson.—The Stevenson Land & Improvement Co., capital stock \$5,000,000, has been incorporated to establish a town near Stevenson, establish manufactories, mine coal, iron ore and other minerals, etc.

Talladega.—There are prospects of works being established to manufacture wood alcohol, etc. The Talladega Land & Improvement Co. can give particulars if anything be done.

Talladega.—Machinery has been placed at the Shanker gold mine near Talladega.

Trussville.—The Trussville & Cahaba River Land Co., reported last week, are building an iron furnace, and will have it in blast in about 4 months.

Tuskaloosa.—A company is being formed to start a manufactory.

Warrior.—The Coaldale Brick & Mining Co., previously reported, are preparing to manufacture red and fire bricks. Will build 100 coke ovens.

ARKANSAS.

Antimony City.—A company has been formed to erect the Bessemer steel plant, previously reported, with E. A. Bayrd, of St. Louis, as president; Merrill Watson, St. Louis, secretary, and William F. Roberts, manager.

Bear.—Barnes & Rogers will soon erect a bank building.

Bear.—The Hawkeye Mining Co. will spend \$10,000 in purchasing a 40-ton pulverizer and an amalgamating and concentrating plant, to be erected four miles from Bear.

Camden.—The El Dorado & Southern Railroad Co., capital stock \$300,000, has been chartered to build a 25-mile railroad from Camden to El Dorado. The directors are J. G. Smith, Jesse B. Moore, W. H. Goodwin, S. R. Chew and others.

Cherry Valley.—A stave factory is being erected.

Corning.—The Baptists will build a church.

Fayetteville.—The capital stock of the company previously reported as formed to prospect for oil and gas, with L. Gregg as president, is stated as \$7,500. Will probably sink a well soon.

Fort Smith.—The Fort Smith Natural Gas & Power Co., capital stock \$50,000, has been organized with Harry E. Kelley, president; J. H. Carnell, vice-president; Talbott Stillman, secretary, and George T. Sparks, treasurer. The company will erect machinery at once to bore for gas and minerals.

Hamburg.—The Hamburg & Monticello Telephone Co. has been organized with W. T. Wells, of Monticello, as president.

Hot Springs.—The Gold Dust Milling Co. has been organized to develop mines with C. L. Guy as president, and E. A. Nickel, superintendent. Will erect a stamp mill.

Hot Springs.—Guy, Nickels & Hart have purchased the saw mill of Razee & Thompson.

Hot Springs.—E. Hernaheim, of New Orleans, La., is examining mineral lands with a view to forming a company for their development if results of the examinations are favorable.

Little Rock.—The Little Rock & State Line Railroad Co., lately reported as chartered, have commenced surveying their road.

Little Rock.—The name of the company reported last week as to be incorporated to do a printing and book-binding business is the Arkansas Printing Co. The capital stock is \$25,000.

Little Rock.—The Press Publishing Co., capital stock \$25,000, has been organized with E. L. Givens as president, and J. L. Tullis, secretary and treasurer.

Little Rock.—E. C. Wehrfritz is enlarging his Union Machine Works and adding iron foundry and boiler shop.

Little Rock.—William Farrell has purchased 20,000 acres of timber lands in Grant and Saline counties.

Mammoth Spring.—The Mammoth Spring Improvement & Water Power Co., previously reported, will receive, until September 3, bids for building a large stone masonry dam.

Pine Bluff.—The colored Baptists will build a church.

Pine Bluff.—The Pine Bluff Gas Co. will enlarge their electric light plant.

Prescott.—J. M. Montgomery and others will probably form a stock company to purchase the cotton mill of John Matlock at Murfreesboro, and remove it to Prescott.

Rogers.—The name of the mining company lately reported as organized is the Rogers Milling & Mining Co. Will develop lead and silver mines in Madison county. W. A. Miller is president; J. A. C. Blackburn, vice-president; E. R. Morgan, secretary, and J. H. Rackerby, treasurer.

Russellville.—The Melrose Cotton Mill Co. are repairing their mill.

Texarkana.—The Texarkana Ice Co. contemplates putting in machinery of 25 tons capacity.

Vanndale.—Bids for building a courthouse will be received until September 5 by Thomas B. Smith.

FLORIDA.

Acron.—A saw mill has been erected by J. H. Campbell & Son.

Charlotte Harbor.—It is rumored that a machine shop will be started.

Crescent City.—James L. Maul is building a floating saw mill.

De Land.—A Putnam is in the North negotiating for the erection of the electric light plant previously reported.

Fernandina.—The branch of the Jacksonville Refrigerator Ice Works, lately reported to be established, will be for selling ice and not manufacturing.

Fernandina.—E. T. Roux, Albert Gilaibor and George L. Martin will erect a planing mill. Have purchased machinery.

Fernandina.—O. L. Oakes will erect a wood-working factory.

Green Cove Springs.—A brick-yard is being started with Col. Wright as superintendent.

Jacksonville.—T. Murphy will erect a new machine shop and foundry, and has let the contract for the brick work to George D. Goff.

Jacksonville.—The contract to erect the main building for the Sub-Tropical Exposition, lately reported, has been let to a syndicate of mechanics, with A. E. McClure as architect. The total cost is estimated at \$35,000.

Kissimmee.—A party is negotiating for the erection of an ice factory.

Kissimmee.—The Central Railway & Steamship Co., of Boston, Mass., previously reported, are surveying a railroad from Kissimmee to Rockledge and from Kissimmee to Punta Rosa.

Lake City.—A. B. Hart will soon start a crate factory.

Orlando.—A \$20,000 stock company will, it is said, be formed to erect the electric light plant previously reported.

Orlando.—S. W. Speir, reported last week, will erect a bone mill and a corn and feed mill.

Palatka.—B. H. Enos is preparing plans for an academy.

Sanford.—Fred Balcom, general manager American Refrigerating & Construction Co., of Harrisburg, Pa., has been prospecting at Sanford and several other Florida towns with a view to erecting ice factories and cold-storage warehouses.

Tampa.—Z. King, H. F. Lykes and others are negotiating with Western parties for the location of a beef packing establishment.

GEORGIA.

Abbeville.—The name of the company previously reported as formed to encourage the starting of manufactures, is the Abbeville Land & Improvement Co. S. P. Lasseter is president, and E. H. Cutts, secretary.

Americus.—A. R. Coulter has been awarded the contract to build a bridge and the trestles along the railroad to be built from Abbeville to McRae.

Atlanta.—Bills have been introduced in the legislature to incorporate the Chattanooga Eastern Railroad Co.; the Anthony Shoals Land Improvement Co., authorized capital stock \$10,000,000, with E. T. Shubrick and others as incorporators, the Lexington Terminal Railroad Co., to build a railroad from Crawford, via Lexington, to a point on the projected Augusta & Chattanooga Railroad; the Atlanta City & Suburban Street Railroad Co., capital stock \$25,000, with J. C. Kirkpatrick, G. B. Scott, S. H. Phelan, T. L. Cooper and others as incorporators; the Thomasville & Northern Railroad Co., to build from Thomasville to the Florida State line, and from Thomasville to some point on the Central Railroad, with R. G. Mitchell, P. Pittman, T. E. Blackshear, W. H. Mitchell, C. H. Williams and others as incorporators; the Great North & South Railroad Co., to build from Atlanta to the South Carolina State line; the Cleveland Manufacturing & Improvement Co.; the Thomasville & Ty Ty Railroad, and the Washington Street Railroad Co.; and bills to allow the Fulton County (Atlanta) Street Railroad Co. to use steam or other motive power, and to authorize the Georgia Electric Mining & Improvement Co. to build branch railroads.

Atlanta.—The Clifton Chemical & Phosphate Co., capital stock \$50,000, has been incorporated to manufacture fertilizers, sulphuric acid, acid phosphates, and mine phosphate, sulphur, &c., by L. E. O'Keefe, Samuel Parrott, George W. Parrott, R. H. Richards, Paul Romare and others.

Atlanta.—A bill has been introduced in the legislature to authorize the Atlanta & Edgewood Street Railroad Co. to extend their road to Decatur and other points in DeKalb county.

Atlanta.—Samuel W. Goode & Co. have sold 157,000 acres of pine timber lands.

Augusta.—Proposals for building a Masonic temple from the first floor up, will be received until August 31 by O. G. Lynch, chairman.

Augusta.—The Southern Cotton Oil Co. have purchased the barrel factory of the Industrial Manufacturing Co. They will enlarge and improve it.

Augusta.—James P. Verdery, Eugene Verdery, W. B. Lowe, Charles H. Blair and others have incorporated the Augusta & Chattanooga Construction Co., capital stock \$100,000. The principal object of the company is to build the Augusta & Chattanooga Railroad.

Augusta.—George C. Chambers is repairing the Clark Flour Mills, and will put them in operation.

Augusta.—The Commercial Club will probably build a fine club house.

Aurum.—J. W. Woodruff will rebuild his mill and ginney lately destroyed by a flood.

Brunswick.—Fulton, Michelson & Scott have received the contract to build twelve miles of railroad.

Columbus.—The Columbus Southern Railroad Co. expect to contract for the building of their railroad within 6 weeks.

Crawfordville.—E. S. O'Brien & Bro. are building a mill.

Fayetteville.—G. R. Lewis, lately reported as to start a fertilizer factory, will erect a factory to manufacture manure distributors, and wants tenoning and mortising machines.

Hawkinsville.—J. E. Stetson, R. V. Bowen, R. G. Lewis, R. J. Taylor, D. C. Joiner and J. E. Lardler, of Hawkinsville, and W. B. Thomas, of Tennille, have applied for a charter for the Hawkinsville & Dublin Railroad Co., capital stock \$200,000.

Holton.—A company has been formed to develop granite quarries. Will soon begin operations.

Jackson.—A college to cost from \$5,000 to \$6,000 is to be built. J. W. Crum can give particulars.

Jackson.—There is talk of a cotton-seed oil mill being erected. J. W. Crum can give information if anything is done.

Jackson.—A. M. Watkins, Sr., A. M. Watkins, Jr., T. J. Dempsey, J. W. Crum and W. M. Maillet are interested in the company previously reported as to be chartered to build a narrow-gauge railroad to Indian Springs, 5 miles.

Macon.—The Georgia Southern & Florida Railroad Co., previously reported, will build machine shops at Macon.

Macon.—S. Guthman will establish a steam laundry on Cotton avenue.

Macon.—W. H. Moxley & Co. will rebuild their planing mill and box factory reported last week as burned.

Resaca.—The name of the company reported last week as organized to build a canal from the Conasauga river to the Oostanaula river, is the Resaca Canal & Manufacturing Co. S. H. Brown can probably give information.

Rockmart.—A bill has been introduced in the legislature at Atlanta to incorporate a company to develop slate quarries.

Rockmart.—Robinson & Co. are developing the Randall ore mines.

Rome.—R. T. Armstrong, previously reported as to build a hotel to cost about \$125,000, will receive bids for its construction. It is to be five stories high, 90x174 feet.

Rome.—The Beck Marble Co. are building a 7-mile railroad to their quarries.

Tallapoosa.—It is reported that several large syndicates are beginning to open up their large tracts of mineral lands in Haralson county.

Tallapoosa.—A. E. Burke, of New Orleans, La., J. N. Carpenter, Natchez, Miss., and others, previously reported as purchasing and to develop the Cross gold mine, have, it is reported, bought \$100,000 of machinery.

Tallapoosa.—Plans are being prepared for a furniture factory, a cotton factory and a rolling mill. The Tallapoosa Land, Mining & Manufacturing Co. can give information.

Tallapoosa.—A large school building is to be erected. The Talladega Land, Mining & Manufacturing Co. can give information.

Thomasville.—It is reported that an ice factory is to be erected.

Tunnel Hill.—Manganese iron ore mines are being developed by McConnell & Co.

Valdosta.—The Florida Midland & Georgia Railroad Co. will extend their railroad from Valdosta to Dublin.

Watkinsville.—\$12,000 of bonds will be issued to build the courthouse previously reported.

Waynesborough.—Burke county will issue \$12,000 of bonds to build a courthouse.

West Point.—The Tate Springs Co. will build a hotel.

KENTUCKY.

Ashland.—A company is being formed to build an opera house to cost about \$20,000. Hite & Co. can give particulars.

Beattyville.—Lee county has voted a subscription of \$50,000 to the Louisville, Cincinnati & Virginia Railroad.

Catlettsburg.—H. P. Wellman contemplates adding an iron foundry to his machine works. Wants circular of foundry cupolas.

Herndon.—The saw mill of Pace & Vaughn, reported last week as damaged by an explosion, has been repaired.

Louisville.—Robert P. Bonnie, Samuel Castleman, C. H. Hubbert, William T. Rolph and H. T. Hanford have incorporated the Little Falls Improvement Co., capital stock \$50,000, to buy, sell and improve lands, develop water powers, establish factories, &c.

Louisville.—Walter Davis has received the contract to furnish the city with 4,000 tons of granite, at \$35,000.

Louisville.—Jonathan S. Tibbetts, Artemus T. McNaughton and Henry Biedinger have incorporated the International Gas Machine Co., to manufacture hydro carbon gas machines, &c. The capital stock is \$30,000.

Louisville.—The Old Deposit Natural Gas & Mining Co., J. T. S. Brown, president, 830 W. Main street, are advertising for bids for sinking one or more gas wells.

Mayfield.—Wright, Reaves & Co. have bought machinery for a roller flour mill.

Millersburg.—A company is being organized to bore for gas.

Paducah.—The name of the company, reported last week as to build iron furnaces, &c., is the Paducah Land, Coal & Iron Co.

Pleasant View.—J. B. Furnish will remove his saw mill from Woodbine to Pleasant View.

Proctor.—A company has, it is stated, been formed to bore for gas.

Winchester.—Mr. Garner is organizing a company to bore for water and natural gas.

LOUISIANA.

Dorcyville.—Mr. Parks is building a sugar house on the Cora Plantation.

New Orleans.—The Crescent City Brewing Co., capital stock \$250,000, has been organized with E. V. Ames as president; Albert Mackie, vice-president, and Mr. Lang, superintendent. The company have purchased a site and are preparing plans for a large brewery to be built immediately.

New Orleans.—The Pelican Saw Mill & Manufacturing Co. are building the short branch railroad, the permit for which was lately reported as being asked for by A. Martin.

New Orleans.—The Red Star Shoe Store have lately started a shoe factory.

New Orleans.—A new elevator is to be put in the custom house. Major Bradley can give information.

New Orleans.—A bill has been introduced in the city council to appropriate \$1,500 to sink an artesian well.

MARYLAND.

Baltimore.—Charles Pracht & Co. are erecting a new four-story candy factory on Franklin street.

Baltimore.—E. L. Parker & Co will rebuild their large warehouses, lately reported as burned.

Baltimore.—Tyler Bros. have completed a five-story addition, 30x50 feet, to their cake and cracker factory. Have put in engine and boilers of 100 horse-power.

Baltimore.—B. F. Gambrill, previously reported as building a felt factory at Woodberry, has, with Charles K. Oliver and others, incorporated the Druid Felt Co., capital stock \$100,000, to manufacture felt, roofing paint, &c.

Knoxville.—The name of the company previously reported as formed to build a creamery by H. T. Deaver and others, is the Blue Ridge Creamery Co. The capital stock is \$3,000.

Lonaconing.—E. J. Fredlock, of Piedmont, W. Va., has received the contract to erect a passenger and freight depot for the Cumberland & Pennsylvania Railroad Co.

Lonaconing.—The George's Creek Coal & Iron Co. have opened a new mine.

Westminster.—The Manchester Cigar Manufacturing Co. have purchased a site to build a three-story brick factory, 36x130 feet. Edwin Oursler, of Manchester, has the contract.

Woodbine.—The Woodbine Paper Mill is being repaired and some new machinery is being added.

Washington, D. C.—The Washington Gas Light Co. will greatly enlarge their works.

Washington, D. C.—Mrs. M. J. Tulley will erect a \$10,000 brick dwelling.

Washington, D. C.—John A. Baker will erect a \$5,000 brick warehouse on 8th street.

MISSISSIPPI.

Claiborne.—J. D. Donald will, it is said, develop acid iron earth deposits.

Enterprise.—The name of the company previously reported as being organized to erect charcoal works at several points is the Kamper & Levin Manufacturing Co. Will erect works at Laurel at once with a capacity of 25 cords daily.

Greenville.—H. Sommers & Sons will erect a new building for manufacturing coffins.

Greenville.—The Greenville Ice Manufacturing Co. will put in a 15-ton machine next year.

Greenville.—A planing mill is being erected by Sexton & Hunter.

Greenville.—The Planters' Compress & Warehouse Co., previously reported, have let the contract to erect a warehouse and other buildings to J. J. Harty at \$20,588.

Greenville.—The Planters' Cotton Seed & Crushing Association will double the capacity of their mill.

Laurel.—Kamper & Levin, reported last week as erecting works to manufacture wood alcohol, &c., have organized as the Kamper & Levin Manufacturing Co. The capacity of works is 25 cords per day. Will also erect machinery to manufacture cheap furniture, mouldings, brackets, &c.

Woodville.—The Woodville Creamery Co. has been formed to establish the creamery lately reported.

Yazoo City.—The city will sink an artesian well.

NORTH CAROLINA.

Asheville.—The Asheville Street Railroad will be extended.

Big Falls.—J. V. Pomery and others, reported last week as to build a 2,000 spindle cotton factory, have incorporated the Big Falls Cotton Mills with a capital stock of \$60,000. Are privileged to operate saw and grist mills also.

Buffalo Paper Mills.—E. W. Stubbs has purchased machinery for a shuttle and bobbin factory and is starting an iron foundry and machine shop.

Chadbourn.—The hotel, reported last week, is to be erected by J. A. Brown. It will be three stories.

Charlotte.—A new building to cost about \$10,000 will be erected for St. Peter's Episcopal Church.

Durham.—The Golden Belt Manufacturing Co., capital stock \$50,000, has been organized to manufacture bags, sacks, shirts, &c. J. S. Carr is president and T. B. Fuller is secretary.

Durham.—E. J. Parrish will build a large tobacco warehouse on Parrish street.

Durham.—It is reported that parties from Kinston contemplate building a cotton factory at Durham.

Edenton.—A town is to be started at the terminus of the Suffolk & Carolina Railroad on the Chowan river. A saw mill and a hotel are to be erected. The Suffolk & Carolina Railroad Co. (office, Suffolk, Va.) can give information.

Magnolia.—Messrs. Croom are repairing and improving their gin and grist and saw mill.

Montgomery County.—The Sam Christian Mine, it is reported, has been sold to English capitalists who have formed a £200,000 company to work it. £50,000, it is said, will be paid up at once and spent on the property, £30,000 going into pumping plant and flumes to carry water 3 miles. Theo. Buerbaum, Salisbury, N. C., can probably give particulars.

Morehead City.—The sale of the Atlantic Hotel to J. S. Carr, of Durham, and others, lately reported, has been confirmed. They will add the 100 rooms to the hotel, an electric light plant and a steam laundry.

Morganton.—It is stated that A. W. Wilson & Bro. will probably rebuild their furniture factory, previously reported as burned.

Murfreesboro.—Work on the Murfreesboro Railroad, reported last week as organized with B. B. Winborne as president, will be commenced in September or October.

Oxford.—The town will decide September 12 whether or not to spend \$10,000 for a market house and town hall.

Oxford.—It is rumored that the Cooper Tobacco Co. will build a large factory.

Raleigh.—The Raleigh Oil Mill & Fertilizer Co. have ordered electric light and sprinkling machinery for their works.

Raleigh.—The North Carolina Railroad Co. will soon begin work on their new passenger depot.

Salem.—A syndicate has been founded in Maine to develop stone quarries in North Carolina. Are now making investigations with a view, it is claimed, to spending \$300,000 in purchasing and equipping quarries, &c. C. A. Hege can give information.

Taylorsville.—E. L. Hedrick will build a hotel to cost \$5,000.

Wilmington.—The Carolina Oil & Creosote Co. are enlarging their works, and will shortly want bids for sinking an artesian well.

SOUTH CAROLINA.

Barnwell.—John M. Lawton and others contemplate building a railroad to Savannah, Ga.

Camden.—The contract to lay the rails on 102 miles of the Chicago, Cincinnati & Charleston Railroad from Camden to Black's has been let to Taylor & Elmer, of New York. They have commenced work.

Charleston.—The Charleston Electric Light & Power Co. have purchased and will add to their present plant an incandescent plant of 500 lights capacity.

Glendale.—William B. Richardson and others, previously reported as to develop gold mines, will erect more machinery.

Greenville.—The capital stock of the Huguenot Mills (cotton) will shortly be increased from \$51,400 to \$150,000.

Greenville.—It is stated that a company has been formed to build a \$100,000 hotel on Paris mountain and a dummy railroad to the hotel. The mayor can probably give information.

McCormick.—James Cothran is erecting a mill and ginney.

Moultrieville.—J. F. Foster, E. W. Moise, R. A. Kinloch, W. M. Bird and others contemplate building a bridge to connect Sullivan's Island with the mainland at Mount Pleasant, to cost about \$20,000.

Spartanburg.—B. H. Rice, of Union, will build a street railroad if franchise is granted.

Summerville.—A company will probably be formed to build a hotel.

Yorkville.—A proposition has been made for the building of water works.

Walhalla.—V. L. Norman is negotiating for the erection of a hotel.

TENNESSEE.

Athens.—The Athens Mining & Manufacturing Co. are advertising for bids for erecting buildings for their manufactories, previously reported to be established.

Bristol.—The Clinch River Veneer Co. are adding some new machinery to their works.

Bristol.—The South Atlantic & Ohio Railroad Co. want to contract for the manufacturing and laying of 2,000,000 brick.

Bristol.—Efforts are being made to form a company to manufacture boots and shoes.

Bristol.—A party from Massachusetts is prospecting for a site for a pulp mill.

Bristol.—S. M. Elliott, of Chicago, Ill., is organizing a stock company to build a roller flour mill of 75 barrels capacity. The capital will be \$20,000.

Bristol.—W. G. McDowell is negotiating for the building of water works.

Chattanooga.—R. C. Hutchinson, of Washington, D. C., is negotiating with the East End Land Co. for a site for glass works.

Chattanooga.—It is reported that Mr. Pennock, previously reported as leasing oil and gas lands for development, is completing the organization of his company.

Chattanooga.—John P. Richardson will erect several dwellings on the property of the East End Land Co.

Chattanooga.—The Cincinnati Southern Railroad Co. will move their switching yards to another location.

Chattanooga.—G. W. Thompson, C. E. Stivers, I. B. Merriam, R. M. Barton, Jr., F. T. Hampton and others are organizing a company to build a bridge across the Tennessee river. The capital stock will probably be \$150,000.

Chattanooga.—The Chattanooga Driving Association contemplate building a racing track at a cost of about \$25,000.

Chattanooga.—J. F. Loomis will erect a \$15,000 brick building.

Chattanooga.—The Suck Creek Coal & Manufacturing Co. has been chartered by J. W. C. Wilson, E. Wilkins, W. L. Albright, W. P. Craig and R. F. Craig. Will open mines near Chattanooga and build a large number of coke ovens.

Chattanooga.—It is reported that Grant Bros. and Rawlings & McCrath will bore for oil and gas.

Chattanooga.—It is rumored that one or more companies are being formed to develop oil and gas lands.

Chattanooga.—F. H. Foster, of Cincinnati, O., is negotiating for the removal of a factory to Chattanooga.

Chattanooga.—T. B. Redmond, of Rome, Ga., has received the contract to build 14 miles of the Chattanooga, Rome & Columbus Railroad.

Chattanooga.—The city will shortly decide by a popular vote whether or not to issue \$50,000 of bonds to build sewers.

Chattanooga.—It is reported that Stivers, Woodburn & Co. have put in their mill machinery for manufacturing blinds.

Chattanooga.—The Hamilton Natural Gas & Oil Co., previously reported, have asked for permit to lay pipes through the city.

Clarksville.—The Clarksville Electric Light Co. will add an ice factory to their works. The capacity will be about 10 or 15 tons daily.

Dayton.—The Methodists will build a new church. W. G. Allen can give particulars.

Dayton.—The Dayton Oil & Gas Co., previously reported, will commence work on a well September 1.

Ducktown.—The Knoxville Southern Railroad Co., lately reported, will build a 13-mile branch to Ducktown. As soon as

the road is constructed operations at several mines will be resumed.

Gallatin.—J. H. Foster and W. E. Surber have received the contract to erect a school building to cost \$8,500.

Gallatin.—\$1,300 has been raised to sink a gas well.

Johnson City.—Two companies have asked for permit to build water works.

Knoxville.—It is rumored that a company is being organized to erect an electric light plant.

Knoxville.—A company is being organized with a capital of \$150,000, to build a hotel.

Knoxville.—The Great Southern Marble Co. have secured a site to build a large mill to cost \$100,000. Will commence work at once.

Manchester.—It is reported that a company is being formed to build a large hotel.

Memphis.—James B. Enery, C. O. Johnson, B. R. Spratley, O. P. Bard and others have chartered the Idlewild Land Co.

Memphis.—Smith S. Leach, captain of engineers, U. S., will receive proposals until September 20 for about 300,000 cubic yards of levee work.

Memphis.—The East End Railway Co. have asked for permit to build on certain streets.

Memphis.—The Newport News & Mississippi Valley Railroad Co. will soon begin building their large new union depot, previously reported. The cost will be about \$250,000.

Memphis.—It is probable that a union depot will be built in the southern part of the city.

Moody Creek.—It is rumored that an English company will erect zinc works.

Moody Creek.—It is reported that a broom factory and a wagon factory are to be established soon.

Nashville.—James Sutherland & Co. have received permit to build a planing mill.

Oliver Springs.—The natural gas and oil company, reported last week, will lay pipes to Knoxville if gas is found in sufficient quantities.

Tennessee.—The East Tennessee Iron & Steel Co., capital stock \$500,000, has been organized with David S. Packard, of Boston, Mass., as president, and William Spalding, treasurer. The company own 30,000 acres of coal and iron lands in East Tennessee which they will develop.

Winchester.—The capital stock of the Winchester Manufacturing Co., reported last week as erecting a factory, is \$35,000.

Winchester.—J. S. Vaughn & Co. will remove their box factory from Graysville, Ill., to Winchester.

Winchester.—It is probable that a machine shop will be started soon. If anything is done, the Winchester Manufacturing Co. can give information.

TEXAS.

Austin.—The Alliance Milling, Building & Manufacturing Co., of Grayson county, capital stock \$50,000, has been incorporated by W. R. Kendall, Samuel Moore, J. E. Matthews, L. E. Powell, R. G. Graham, W. A. Cot and others.

Beaumont.—The time for receiving bids for building the water works, previously reported, has been extended until September 3. Address J. F. Lanier, mayor.

Brenham.—The Brenham Water Works Co. have contracted to have an artesian well drilled.

Dallas.—The Farmers' Alliance are negotiating for the erection of one or more factories.

Dallas.—An electrical railway will be built at the Dallas exposition grounds.

Dallas.—J. S. Armstrong will build a \$10,000 residence.

Dallas.—The Dallas Oat Meal Co. will enlarge their factory.

Dallas.—N. J. Clayton, Galveston, is preparing plans for a brick Catholic church to cost \$75,000 and a building for the Sacred Heart church to cost \$35,000.

Dallas.—The Dallas Cotton & Woolen Mills, previously reported, have prepared plans for their mill and are looking for a site. The main building will be 75x40 feet.

Dallas.—Wm. Ryan, of St. Louis, Mo., has started a broom factory on Elm street.

Dallas.—G. H. Schoellkopf has nearly completed his large new harness and saddlery factory previously reported.

Dallas.—The Mosher & Powell Manufacturing Co. have added a foundry to their machine works lately started.

Del Rio.—The time for receiving the bids for building the courthouse, previously reported, has been extended to September 12. Address W. K. Jones.

Denison.—The Denison Cotton Manufacturing Co. have selected a site for their factory, previously reported.

Denton.—The commissioner's court and the city council have appropriated money to sink an artesian well.

Galveston.—Albert Weis, J. M. Brown, W. F. Beer, John Cotter and N. W. Cuney have been appointed commissioners to superintend the improvement to be made to the water supply of the city.

Galveston.—It is reported that John F. Hart has the contract to erect an \$80,000 building for Walter Gresham and a \$75,000 building for George Sealy.

Galveston.—Rosamond, Milam & Bro. have received the contract to furnish brick for the Galveston Cordage and Bagging Factory, previously reported.

Houston.—The Houston Building Co., reported last week as chartered to manufacture and sell portable houses, are erecting a factory. Thomas W. Jackson is president and E. L. Dennis, secretary.

Marble Falls.—John Dimelow, of Austin, is establishing works for manufacturing fire brick, hydraulic cement, &c.

Marshall.—W. Woodson has received the contract to build the bridges along the St. Louis, Arkansas & Texas Railroad Co's branch from Louisville, Ark., to Shreveport, La.

McKinney.—The Collin County Milling Association will be chartered to build a mill.

Paris.—It is reported that money will soon be secured to complete the Marshall, Paris & Northwestern Railroad.

Sabine Pass.—The Kansas City & Sabine Pass Railway Co., capital stock \$2,500,000, has been incorporated at Kansas City, Mo. Harrison M. James, of New York, is president, and Fred M. Day, Brooklyn, N. Y., treasurer. The road will be about 700 miles long.

San Diego.—There is talk of a company being formed to bore for oil and gas.

Temple.—The Farmer's Alliance have decided to build a cotton factory to cost \$100,000.

Trinity.—Cameron, Anderson & Co. have put their new saw mill, 10 miles from Trinity, in operation.

Waco.—The Southern Electric Light Co., previously reported as proposing to erect an incandescent plant, have ordered machinery.

Waco.—The water works for which \$150,000 of bonds were previously reported as being issued, will probably be constructed by the city.

Waco.—The contract to build the city hall previously reported, has been let to Ulander & Ulander, at \$51,175.

Waco.—The Farmers' Alliance, Dr. Macune, president, previously reported as making a proposition to establish manufactories, have decided to build a \$100,000 cotton factory.

Warren.—Michigan parties contemplate erecting a saw mill with a daily capacity of 80,000 feet. The Warren Lumber Co. can give information.

Weatherford.—Matt C. Cameron, city secretary, has been negotiating for the building of the water works, previously reported. If nothing is done, a local company will probably be organized to build the works.

Weatherford.—The Methodists will shortly commence work on a church to cost \$10,000.

VIRGINIA.

Evinston.—William Hickson is preparing to start a broom factory.

Goshen Bridge.—A coal mine is being opened.

Lexington.—The Lexington Manufacturing Co. are putting new machinery in their flour mill to increase capacity.

Lynchburg.—C. A. Bruce is preparing to enlarge his candy factory on 8th street.

Lynchburg.—W. F. Mathews will erect a large brick building.

Lynchburg.—The Glamorgan Iron Works are adding water pipe machinery at a cost of about \$5,500.

Norfolk.—George W. Grafflin, of Baltimore, previously reported as purchasing the property of the Upshur Guano Co., will rebuild the works on an enlarged scale.

Norfolk.—M. A. & C. A. Santos will erect a six-story building on Bank street.

Norfolk.—Mr. Kim and others are building a trucking railroad near Norfolk.

Portsmouth.—\$75,000 has been appropriated for the purchase of new machinery and tools for the U. S. Navy Yard.

Pulaski City.—The Chambers Valley & New River Railroad Co. has been formed to build a railroad to connect the Norfolk & Western Railroad with the railroads of North Carolina. George T. Mills, of Philadelphia, Pa., is president.

Pulaski City.—The Crozer Steel & Iron Co., of Roanoke, are, it is reported, erecting more ore-washing machinery.

Richmond.—The Richmond City Railway Co. will issue bonds to build the extensions of their road lately reported.

Richmond.—The Mechanics Institute has been chartered, and will spend \$60,000 in erecting a technological school and \$15,000 in equipping it.

Richmond.—The Virginia & North Carolina Wheel Co., previously reported, are now erecting their coach material factory. Probably several hundred hands will be employed.

Richmond.—A large new carriage factory is being built by R. H. Boscher's sons. It will be four stories, 46x146 feet.

Staunton.—A brick-yard has been started by H. H. Wallace.

Tazewell C. H.—John Sexton and George O. Houston, of Roanoke, have received the contract to build 5 miles of the Clinch Valley Railroad. George T. Mills, Philadelphia, Pa., 25 miles, and McGrann & Stewart, Lancaster, Pa., 25 miles.

Vinton.—W. H. Walden is developing an iron ore mine near Vinton.

Wise C. H.—The Virginia & Tennessee Coal & Iron Co., reported last week, have in view the ultimate building of a steel plant.

WEST VIRGINIA.

Hartford City.—R. L. Miller, of St. Louis, Mo., has received the contract to build an iron bridge.

Huntington.—R. Shore is preparing to erect a hotel.

Huntington.—The Huntington Manufacturing Co. will be chartered to manufacture wire fence machines.

Keyser.—It is proposed to organize a stock company to start a woolen mill.

Morganton.—A company will probably be formed to manufacture fire brick.

Moundsville.—Craig & Cappear are leasing oil and gas lands for development.

Nuzum.—J. M. Hartley, Daniel L. Morrow, John B. Crane and James E. Watson, of Fairmount, have chartered the Glade Fire Brick Co., to manufacture fire brick and other products of clay, mine coal, iron ore, &c. The capital stock is limited to \$100,000.

Piedmont.—Martin Shaughnessy will start the cigar factory reported last week.

Powellton.—The Mount Carbon Coal Co. have erected machinery for crushing coke. Are erecting their second 100 ovens.

Webster County.—It is reported that Michael Jeffers, of East Saginaw, Mich., has purchased 250,000 acres of iron ore, coal and timber lands with a view to developing.

Wheeling.—N. B. Scott, George K. Wheat and others contemplate establishing glass works.

Wheeling.—The incorporators of the Wheeling Railway Co., reported last week, are E. W. Dunaway, N. Reister, Sr., Michael Healy, John M. Sweeney and Charles Horstman.

Wheeling.—J. A. Miller, Thomas O'Brien, W. L. Hearn and R. Staln, of Wheeling, E. R. Hearne, Passaic, N. J., and others have formed the West Virginia China Co., capital stock \$75,000. The company have bought a site, and are preparing plans and specifications for their buildings.

Wheeling.—Caldwell & Peterson have added new machinery to their sheet iron roofing works to enlarge capacity.

James F. Peters, box 421, Ironton, Ohio, has purchased a stove foundry at Portsmouth, Ohio, and contemplates moving it to some place in the South. Is seeking a suitable location.

BURNED.

Bettie.—The lumber mill of the East & West Texas Lumber Co.; loss \$25,000.

Benton, Ark.—The saw mill of Mr. Reynolds; loss \$5,000.

Frederick, Md.—The cooper shop of Edward Dyer.

Hartwell, Ga.—The mills of Jacob Parker was lately wrecked; loss \$5,000.

Jonesville, Ala.—The saw and planing mill of H. A. Daniels; loss \$10,000.

Longview, Texas.—The Wilkins Lumber Mill.

Milton, Ky.—The Shadler Flour mill is reported as burned.

Moscow, Texas.—The saw and planing mill of C. Bender & Son; loss \$40,000.

Nashville, Tenn.—The markle works of Peter Swan, the Standard Oil Works and Pearce's Distillery; loss about \$100,000.

Nixonton, N. C.—The saw and grist mill of Mrs. Sawyer damaged by a boiler explosion.

Sharon, Ga.—The mills of J. P. Moore and D. A. Moore were lately destroyed by a flood.

South Pittsburgh, Tenn.—The large saw mill of Duncan, Hughes & Co.; loss \$50,000.

Washington, Ga.—The mill of J. Belknap Smith was destroyed by recent flood.

New Machinery.

RALEIGH, N. C., August 16, 1887.

Editor Manufacturers' Record:
We have just completed the erection of steam apparatus for manufacturing candy to meet the increased demand for our goods. We are using Burkhard's latest improved mixing kettles, together with all the latest steam appliances for increasing the output of fine goods. A. D. ROYSTER & BRO.

MACHINERY WANTED.

(If you desire to purchase machinery of any kind consult our advertising columns, and if you cannot find just what you wish send us particulars as to the kind of machinery needed. We will make you want-known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. You will thus get all information desired as to prices, &c.)

Foundry Cupolas.—H. P. Wellman, Catlettsburg, Ky., wants circulars from builders of foundry cupolas.

Turning and Mortising Machines wanted by G. R. Lewis, Fayetteville, Ga.

Water Works.—J. B. Felder, mayor, Americus, Ga., invites bids for building water works for cash.

Iron Wharf.—Proposals for building an iron wharf at Fort Monroe, Va., will be received until September 22 by Peter C. Hains at U. S. Engineer's office, 2136 Pennsylvania avenue, Washington, D. C.

Artesian Wells.—The Carolina Oil & Creosote Co. will shortly want bids for sinking an artesian well.

Water Works.—Bids for building water works at Greensboro, N. C., accompanied by plans and specifications, will be received until September 1 by the mayor.

Bridges.—M. L. Garrison, Front Royal, Va., will receive bids for erecting several bridges in Warren county. Stone and iron bridges preferred.

To Develop Mineral Lands.

NASHVILLE, TENN., August 16, 1887.

Editor Manufacturers' Record:
A company has been formed in Virginia to develop mineral lands. A number of gentlemen in Tennessee and Virginia have purchased something over 100,000 acres of very valuable coking coal lands with the view to uniting the valuable iron property with them, and ultimately making a steel making plant under the title of the Virginia & Tennessee Coal & Iron Company.

G. M. FOGG.

ATLANTA, GA., August 18, 1887.

Editor Manufacturers' Record:
Joseph M. Brown, William A. Russell, James A. Adair, Joseph B. Hunnicutt and others have incorporated the Hunnicutt Rheumatic Cure Co., to manufacture and sell Hunnicutt's Rheumatic Cure, or any other proprietary medicine or medicines. The capital stock of said corporation will be \$15,000. J. M. M.

Will Bore for Oil and Gas.

CHATTANOOGA, TENN., August 17, 1887.

Editor Manufacturers' Record:
The Chattanooga Oil & Gas Co. has been organized for the purpose of sinking several wells in this vicinity. Will begin work as soon as all arrangements necessary can be made. CHATTANOOGA OIL & GAS CO.

NEW ORLEANS, LA., August 13, 1887.

Editor Manufacturers' Record:
We are building a branch railroad from L. N. O. & T. R. R., which will connect our mill with all the railroads running into this city, so that we are prepared to do business in any direction. A. MARTIN, Prest.

Soap Factories.

CHATTANOOGA, TENN., August 16, 1887.

Editor Manufacturers' Record:
I intend to build a soap factory at Knoxville, with capital of \$100,000. Am also just about building a duplicate in Memphis. These factories will make four within a little over a year that I have put in operation—three in the South. M. J. PALMER.

CLEVELAND, TENN., August 18, 1887.

Editor Manufacturers' Record:
I have received the contract to complete a college in Jasper, Tenn., for the amount of \$18,700. S. W. MARSHALL.

Building New Carriage Factory.

RICHMOND, VA., August 19, 1887.

Editor Manufacturers' Record:
We are just about completing our new carriage factory, and it will be ready to occupy in a few weeks. It is on northeast corner of 9th and Carey streets. It is four stories high, 156x46 feet. Has a large elevator 15x9 running all through the house. R. H. BOSHER'S SONS.

Erecting Planing Machinery.

ALEXANDRIA, LA., August 13, 1887.

Editor Manufacturers' Record:
We have erected a cistern and tank factory here, and have made arrangements with Mr. Julius Levin, who owns or controls 12 saw mills, to do all his planing, and we are now putting in machinery for that purpose. Our building is 50x70 feet, and we have purchased a 35-horse-power Westinghouse engine and boiler. Will be in operation in one week. INGMAN & OLIN.

Improving Mill.

ANSONVILLE, N. C., Aug. 16, 1887.

Editor Manufacturers' Record:
I have contracted for a new 42-inch Success turbine water wheel, shafting and gearing, and am improving my mill only to that extent at this time. WM. LITTLE.

To Erect Charcoal Works.

ENTERPRISE, MISS., August 17, 1887.

Editor Manufacturers' Record:
We expect to commence and erect one 10-retort charcoal works, capacity twenty-five cords per day, at Laurel, and also will put in some other machinery to manufacture mouldings, brackets and cheap furniture. The firm is Kamper & Lewin Manufacturing Co., at Laurel, Hattiesburg and Kingston, Miss. JNO. KAMFER.

WINSTON, N. C., August 19, 1887.

Editor Manufacturers' Record:
I have completed survey and design of sewerage system for Winston and Salem jointly. The construction will be by the town, under my immediate charge as engineer of the sewerage committee. J. L. LUDLOW.

Railroad to be Built.

KNOXVILLE, TENN., August 18, 1887.

Editor Manufacturers' Record:
The Knoxville Southern Railroad Company, chartered in Tennessee as part of the Marietta & North Georgia Railway Company, chartered in North Carolina and Georgia, will form line from Knoxville, Tenn., to Atlanta, Ga., about 200 miles long, with spur and loop lines to various points where minerals and timber will add traffic. Work of changing gauge of portion built at Marietta and constructing standard gauge at Knoxville will be begun immediately.

Machinery Wanted.

FAYETTEVILLE, GA., August 17, 1887.

Editor Manufacturers' Record:
I expect to put up my shop at Fayetteville, Ga., to manufacture any kind of work, but I expect to make a specialty of manufacturing a machine to distribute compost, such as home-made fertilizers. I want a tenoning and mortising machine. G. R. LEWIS.

AURUM, GA., August 15, 1887.

Editor Manufacturers' Record:
My millhouse, ginhouse and cotton press were washed away on the 30th of July. Will rebuild this fall and winter. The mill-houses of J. Belknap Smith, D. A. Moore and J. P. Moore, all on the same stream (Little river), were washed away at the same time. J. W. WOODRUFF.

ANNISTON, ALA.

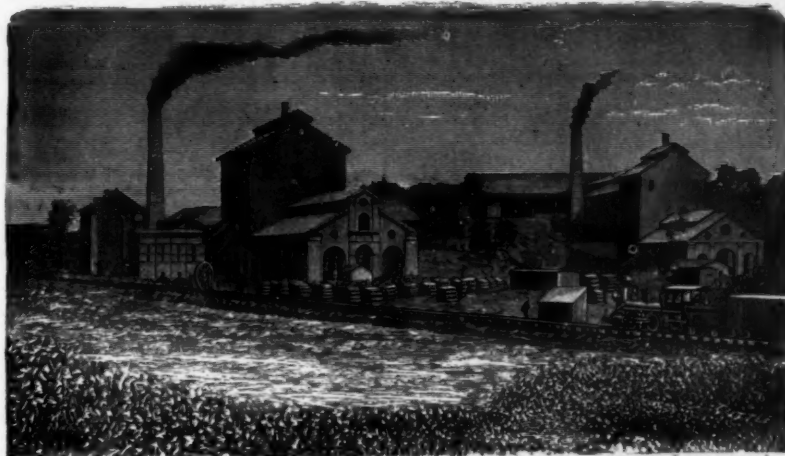
"The Model City of the South."

THERE is no healthier or more charming place of residence in America than Anniston; built on the slope of one of the highest of the chain of the Blue Ridge in Alabama, it commands scenery that is unapproachable in the State. Nature could not have formed a more beautiful place for man to build a city or given greater natural advantages. The natural drainage is most thorough and complete, while in addition the city is preparing a system of underground sewerage. *A more delightful and invigorating climate cannot be found anywhere:* mild in winter, cool in summer, a thousand-feet above the Gulf, with the high and broken chain, range after range in the east, Blue Mountain in the north, Coldwater Mountain in the southwest, make Anniston the *coolest, healthiest and most attractive of any city in the South.* It has the richest agricultural country surrounding and tributary to it in the State, to support a manufacturing and mercantile population. The mountain sides will grow the grape and every kind of large and small fruit to perfection, and the valleys every product of diversified farming. *It is in the heart of the richest mineral district of the South,* and commands the great fields of brown hematite ores on which the great and successful manufacture of iron must in the end depend for quality and profit in every branch of most skillful and best manufactures of iron and steel. It has tributary to it *the best and most extensive pine forests in North Alabama,* that are reached by roads owned and controlled by Anniston citizens, while it has secured to its industries the very best coal mines and coking coal in Alabama. There is no city in America, in proportion to population, that has the manufactures of Anniston, or employs as many working men, or does a larger mercantile business. The industries already in full and profitable operation in Anniston are the **two Woodstock Furnaces** producing six hundred tons of Standard Car Wheel and Malleable Iron per week, and the **two Clifton Furnaces**, tributary to Anniston, producing nearly as much more. **The Car Works** are fully employed turning out forty cars per week, and are introducing new machinery and

larger engines to increase their capacity to twenty cars per day.

The Rolling Mill and Car Wheel Foundry and Steam Forge are among the largest in the South, of a capacity of two hundred wheels, a consumption of 120,000 pounds of metal per day, exclusive of the Rolling Mill and Steam Forge. These works are being enlarged to meet the increasing demands upon them. **The Cotton Factory** is one of the largest in the South, containing 11,700 spindles, and is running to its full capacity, while the foundry of **Murray & Stevenson**, and machine shop of **Pindar & Co.**, and planing mills of **Miller & Smith** and **Farrar & Co.** employ a large number of men and are crowded with work. The new industries that are now under way and provided for will within the next twelve months **Add Four Thousand Additional Working Men to Anniston's Population.** Two of the **Largest Iron Furnaces in the South**, capable of producing two thousand tons of iron per week, are progressing rapidly, and one of the **Largest and most complete Pipe Foundries in the world for the production of Gas and Water Pipe** is under construction,—it will employ nine hundred men.

The Steel Bloomery, for the production of Steel Blooms, is

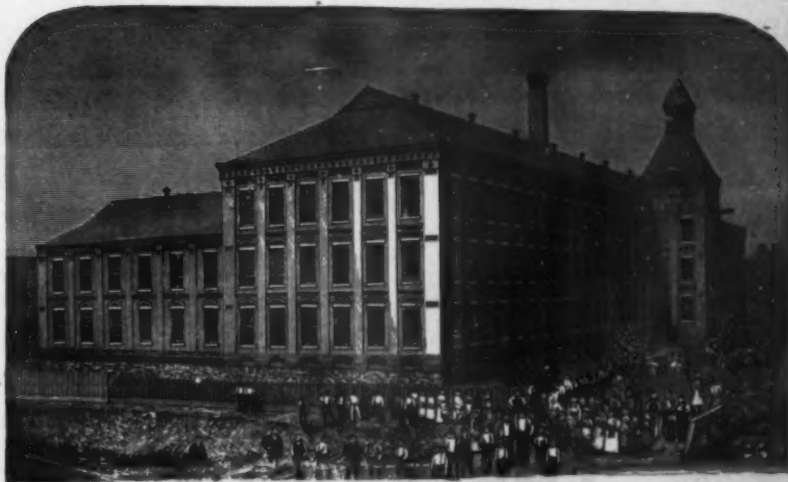


WOODSTOCK FURNACES—ANNISTON.

nearly completed, and the **Fire-Brick Works of Taylor & Sons** are ready for operation. The **Ninety-Inch Morse Cotton Compress**, with its warehouses, will be ready to receive the coming crop. Forty thousand bales, it is estimated, will be secured to Anniston from the territory that its system of railroads have opened up. The completion of the **Anniston & Cincinnati Railroad** during the present year, that will be owned and controlled by Anniston's citizens, opens up new territory and forms a *New and Shorter Grand Trunk Line to Cincinnati and the great Northwest, and to the Southwest via New Orleans and Shreveport.*

It is only the profits of business and labor that can add to the wealth of a community, add to or maintain the value of real estate, and add to the prosperity of its people. Having this in view, every industry and business in Anniston is established on a *profitable* basis. All its merchants are doing a large and profitable business, far larger than they prepared for or anticipated; it is the same with the manufacturers, while *not a dollar of debt has been created*, either by issue of a bond or placing of a mortgage on any of its old or new industries, leaving their earnings free from fixed charges that must be paid in times of depression as well as of prosperity. *To the investor, either in business, manufacturing or real estate, nowhere else are presented opportunities as safe, secure and certain as at Anniston, or where they can rest on as healthy and solid foundation.* It has trunk line railroad communication with all parts of the United States, and freight rates with the most favored of Southern cities. Two lines of railroads are owned and controlled in the interest of Anniston by its own citizens. *It has the best system of Water Works*, with the purest well water from three hundred feet below the surface, drawn from white quartz sand and gravel, and distributed through the city, with a pressure of 100 pounds to the inch, from a reservoir always full, protecting the city against fire and giving it the lowest rate of insurance. *The city is practically free from debt, and taxation limited to one-half of one per cent.* The means for education are the very best. Public Schools of a high grade are provided. One of the finest and best institutes for Young Ladies has been opened, and a College for Boys and Young Men, to which a School of Technology and Chemical Assay Laboratory have been added, is now nearly completed, and the best of teachers and professors secured for both. There are Churches for all denominations, and Hotel Accommodations that are not surpassed in Europe or America. **The ANNISTON INN** provides the quiet and comfort of the most luxurious home. The streets are wide, macadamized, and rolled hard and smooth for pleasant drives. **STREET CARS AND DUMMY LINES** are being built to different parts of the city, and the **ELECTRIC LIGHT** service enlarged and improved, leaving nothing undone to promote the comfort of its citizens and maintain and increase the value of their property and profits of their business.

The Anniston City Land Company, or the Bureau of Information, will give any information desired when applied to, and invite all wishing a charming place in which to live, to do business or to make profitable investments, to visit



ALABAMA MANUFACTURING COMPANY'S COTTON MILL—ANNISTON.

—ANNISTON.—

Tuskaloosa, Ala.

— * ALABAMA'S NATURAL PITTSBURGH. * —

A Railroad & River Town of 6,000 Inhabitants, in the Coal, Iron and Timber District.

Healthful Location. Salubrious Climate. School Facilities Unequaled by any other town in the South.

— "EXAMINE THE MAP." —

— + SITUATED ON +
Queen & Crescent

— TRUNK LINE, —

IN THE
Warrior Coal Field

AND ON THE
WARRIOR RIVER.

Only Navigable River touching the

Alabama Mineral Field.

Eight Months Navigation. Being Surveyed
now to be opened all the year round.

All Water Navigation to

❖ **MOBILE** ❖

AND THE

Entire Gulf and Atlantic Coasts.

— THE —

Tuskaloosa Northern Railroad

Is now under construction into the

MINERAL and TIMBER FIELDS.

— THE —

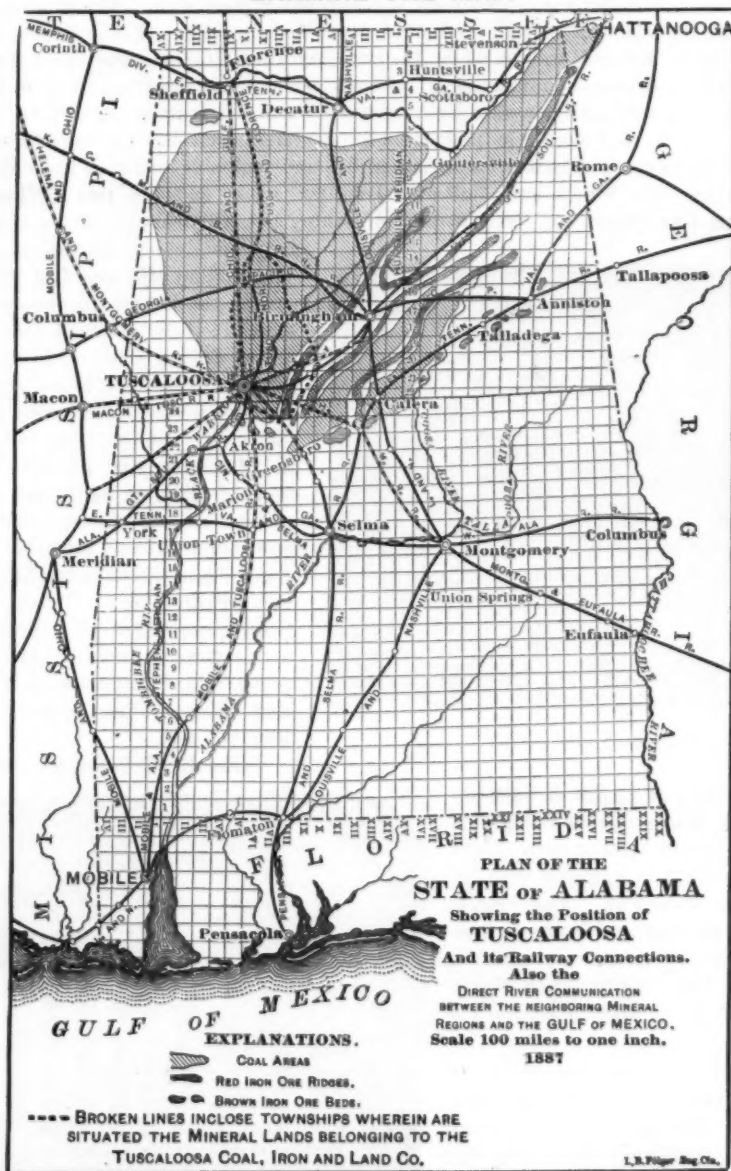
Macon & Tuskaloosa Railroad

Will soon be building into the

COTTON REGION OF MISSISSIPPI.

Fine Farming Region

Around and Below the City.



Superior Inducements

AND

+ ADVANTAGES +

TO ALL

Manufactories Consuming

WOOD,

IRON,

• **COTTON.**

FINE COOKING COAL

In workable veins near city, fully tested.

◀ **The Fire Clay** ▶

Existing in inexhaustible quantities, has been
practically tested and pronounced

The Best yet Discovered in the South.

Street Car and Dummy Lines

NOW BUILDING.

◀ **Water Works and Electric Lights** ▶

TO BE PUT IN AT ONCE.

COTTON MILL

In Successful Operation.

ALSO

LARGE BRICK WORKS

COTTON-SEED OIL MILL, &c.

Manufacturers Seeking Locations in the South have here

❁ **THE GOLDEN OPPORTUNITY.** ❁

Many have availed themselves of it, but such is the wonderful richness of the resources of this section that there is

— ⊕ **ROOM FOR ALL.** ⊕ —

THE **Tuskaloosa Coal, Iron & Land Co.,**

Owning 4,600 acres of city and suburban property, and 40,000 acres of mineral and timber lands, offers liberal inducements to manufacturers
to locate at Tuskaloosa, Nature's City, and invites correspondence and the fullest investigation of its claims. Address

W. C. JEMISON, President Tuskaloosa Coal, Iron & Land Co., **TUSKALOOSA, ALA.**

DECATUR

- ALA. -

GREAT ★ INDUCEMENTS

✧ Offered to Manufacturers ✧

★ TO LOCATE IN NORTH ALABAMA. ★

THE Decatur Land, Improvement & Furnace Co.

WITH A

PAID-UP CAPITAL OF \$1,000,000.

WITH 5,600 ACRES OF TOWN LANDS AND 50,000 ACRES OF MINERAL LANDS, WITH MAGNIFICENT
MANUFACTURING SITES LOCATED ON THE TENNESSEE RIVER, IS PREPARED TO OFFER
GREAT INDUCEMENTS TO MANUFACTURERS IN THE WAY OF SITES,
AND MONEY AT LOW RATES OF INTEREST, AND THE
BACKING OF A POWERFUL COMPANY.

→ TWENTY-SIX ★ INDUSTRIES ←

HAVE LOCATED HERE THE LAST FOUR MONTHS.

WATER COMMUNICATION WITH THE MISSISSIPPI RIVER ALL THE YEAR ROUND.

Two trunk lines of Railroad, the Louisville & Nashville and the Memphis & Charleston, cross the river at this point.

Two more trunk lines in process of construction.

IMMENSE FORESTS OF HARD WOOD AND PINE AND BOUNDLESS QUANTITIES OF COAL AND IRON IN
 EASY REACH. THE WORKINGS OF THE INTERSTATE COMMERCE BILL WILL RENDER
 NORTHERN COMPETITION PRACTICALLY OUT OF THE QUESTION.

The Summers in this region are Cool, the Winters Pleasant and the Locality very Healthy.

CORRESPONDENCE WITH MANUFACTURERS SOLICITED.

ADDRESS ALL COMMUNICATIONS TO

WM. E. FOREST, SECRETARY. - - - - - DECATUR, ALA.

Florence, Ala.

County Seat of Lauderdale County.

At Head of Navigation on Tennessee River, and at Foot of Muscle Shoals Canal,
which will be open Jan. 1st, 1888.

SITUATED on a gently undulating Plateau, 200 feet above high-water mark, surrounded by three large creeks of pure free-stone water. It has a Court House, Two Colleges, Four Public Schools, Six Churches, beautiful wide streets, graded and graveled, and shaded with forest trees; Hotels, fine store houses, Masonic, Odd Fellows, K. of H. and L. of H. lodges. A population of 2,500—moral, social and hospitable.

— The Scenery on Every Side is Picturesque and Beautiful. —

SO MUCH SO THAT IT IS CALLED BY VISITORS

— 'FAIR FLORENCE.' —

There is no Place on the Continent more Healthful and Salubrious.

MANUFACTURES.

Within the last six months numerous manufactures have been located here, among the number:

Five Large Blast Furnaces,
One Rolling Mill,
Three Planing Mills,

One Saw Mill,
One Flour Mill,
One Wooden-Ware Factory.

One Cotton Mill,
One Cotton Compress and Ice
Factory.

Two Brick Machines and
Three Hand-Brick Yards.

There are VAST BEDS OF IRON ORE within a few miles North and
IMMENSE COAL FIELDS SOUTH

ACCESSIBLE BY RAILROADS NOW BEING RAPIDLY CONSTRUCTED.

By the 1st of January the Nashville & Florence Railroad will be completed, making three lines of railroad, and the river, thus opening up **VAST AREAS OF TIMBER, IRON ORE, COAL, Marble, Limestone, Kaolin, Fire-Clay,** and almost every kind of mineral and product.

THE LANDS IN THE SURROUNDING COUNTRY ARE FERTILE AND PRODUCTIVE.

All kinds of Grain, Grasses and Fruits grow to perfection. Springs and Water Courses are numerous, and grazing for Cattle is abundant for eight months of the year.

Pamphlets and maps furnished on application to

Florence Land, Mining & Manufacturing Company.

GADSDEN, ALA.

✱ *Reasons Why Capitalists and Manufacturers* ✱

SHOULD MAKE GADSDEN THE FIELD OF THEIR OPERATIONS.

GADSDEN is situated in the midst of the RICHEST MINERAL SECTION OF ALABAMA; is on the West bank of the Coosa River. This stream furnishes Cheap Transportation to the Coal Fields and Iron Veins and Beds that are found all along its banks.

The Sand Mountain, Lookout and Coosa Coal Fields are at our very doors. *This Coal Cokes equal to any Coal in the South.* The immense forests that cover the mountain and plains, and all along the Coosa and along the five railroads running to Gadsden, will for ages furnish as **CHEAP CHARCOAL AS CAN BE HAD ANYWHERE ON THE CONTINENT.** Limestone is found all around the city,—so Gadsden has in as great abundance, and at small cost, all descriptions of

➤ **Rich Iron Ores, Fine Coking Coals, best class Charcoal, and Limestone for the quarrying.** ⚡

And, as an Iron center, no place in the favored State of Alabama can compare with Gadsden, when we consider our Ore and Fuel supply, our abundant Water, our unequaled Climate, **UNINTERRUPTED HEALTH** and **FINE TRANSPORTATION FACILITIES.** We have the most **INVITING FIELD** to all seeking locations, either for manufacturing iron in any of its varieties, or for investment in any other industries. Gadsden has to-day in successful operation the

LARGEST CHARCOAL FURNACE IN THE STATE,

Has **Four Large Saw Mills**, with annual output of twenty million feet of the finest long-leaf Yellow Pine Lumber, three large Planing Mills, one Foundry and Machine Shop, two Gin and Flouring Mills, large Furniture, Sash and Door Factory, two Metallic Paint Mills, Ice Factory, a splendid system of Water Works, 80 pounds pressure, large steam Brick Works, and in course of construction a 100-ton Coke Furnace, being built by the Gadsden, Alabama, Furnace Co.; has stock subscribed for an additional Charcoal Furnace, has a National Bank, Cotton Compress, large Cotton Warehouse, handling 15,000 bales cotton, and a magnificent agricultural country all around us.

➤ **The Gadsden Land and Improvement Company** ⚡
OWNS 3,000 LOTS,

And invites capitalists and manufacturers to come to Gadsden and see its advantages, pledging themselves to donate to any manufactory locating here, and working twenty-five men or more, **GROUND UPON WHICH TO LOCATE PLANT**, accessible to railroad or river. *Our Railroads afford transportation facilities equal to any point in the South.*

The Rome & Decatur gives close connections with the East Tennessee, Virginia & Georgia and Louisville & Nashville systems, the Anniston & Cincinnati with East Tennessee, Virginia & Georgia and Richmond & Danville, also the Alabama Great Southern Railroad; the Tennessee & Coosa Railroad with Alabama Great Southern, also the Tennessee River at Gunterville and the Central Railroad, when built, from Casselton to Decatur, making us on the short line from Kansas City and the West to Atlanta and the South Atlantic Coast.

Lots are Sold on the Most Favorable Terms:

One-third CASH, balance in one and two years.

We have a population of over 4,000, good Schools, and Churches of all denominations; splendid system of Electric Lights, Telephone Communication over the city, also to Rome, Ga. Boats run regularly the year round on the Coosa, carrying U. S. mail and freights from this point to Rome, Ga., a distance by water of 154 miles.

FOR FURTHER PARTICULARS, ADDRESS SECRETARY OF

The Gadsden Land and Improvement Co., ⚡ Gadsden, Ala.

Newsy Notes, Agricultural and Manufacturing, from Mississippi.

[Special correspondence MANUFACTURERS' RECORD.]

ABERDEEN, MISS., August 21, 1887.

The Stonewall Cotton Factory, on the Mobile & Ohio Railroad, in Clark county, about three miles south of Enterprise, is one of most complete establishments in the South. Its grand Corliss engine is a marvel of power and beauty, and its village of operatives is a picture of order, neatness, system and rustic contentment. Like the Wesson Mills and other kindred establishments in Mississippi, it has obtained its hardy and industrious operatives from the families of the white residents of the vicinity.

De Kalb, the county seat of Kemper county, has a fine tannery and a good harness factory.

About a mile from Corinth is one of the most extensive nurseries of silk mulberry trees in the South.

At Carrollton, the county seat of Carroll county, is a splendid cotton factory building erected just before the war by Hon. J. Z. George, present United States Senator, and other prominent planters. But for the "late unpleasantness" it would now be a rival of the great cotton and woolen factory, the Mississippi Mills, at Wesson, in Copiah county. It is likely that this building can be bought at a bargain, and if so, a grand cotton factory could be well located.

Bogue Chitto, in Lincoln county and the region thereabouts, boasts some of the finest saw mills, planing mills, and drying kilns in the South. Two private or mill railroads connect them with the Illinois Central, one about 12 miles long, running out from Brookhaven, and the other some 9 miles in length, running out from Bogue Chitto station. Neither of these roads are on the maps.

The United States holds reservations of live oak, for naval purposes, in Jackson, Harrison and Hancock counties.

Many inquiries come to the general land office in regard to the islands lying off the coast, from parties who want to buy them for the purpose of planting oysters in the admirable coves and bays that indent their shores; but the most of them have never been surveyed except as regards coast lines.

The Chickasawhay river was navigated before the Mobile & Ohio Railroad was built, as high up as Enterprise, in Clarke county. Now that rich deposits of iron have been discovered in the vicinity of that town, it is likely that an effort will be made next winter to have this stream included in the river and harbor bill.

Greenwood Springs, in Monroe county, about 18 miles northeast of Aberdeen, are among the most wonderful mineral waters in America. They have never been fully analyzed, but there is hardly any disease to which flesh is heir that does not yield to the influence of this water, which is at the same time a mysterious and powerful medicine and a cold and delicious beverage. These springs were well-known to the natives long before the advent of the white man as "great medicine," and though no means is now known of transporting the water so as to maintain it in its crystal purity, there is every reason to believe that the Indians possessed the precious secret, and conveyed it from the fountains among the great hills to the swamps of the distant valley of the Mississippi. The Kansas City, Memphis & Birmingham Railroad, which is rapidly nearing completion, and its branch from Aberdeen, will open up this wonderful watering place to the world.

The lovely villages on the south coast of Mississippi are becoming as popular resorts for Northern invalids in the winter, as they always have been for Southern pleasure seekers in the summer. The coast hotels are among the best in the South.

The people of the Crescent City are in the habit of speaking of the south coast of

Mississippi as "the lungs of New Orleans." Many of the lovely villas on the coast are the property and summer homes of the rich merchants, bankers and capitalists of that city.

Vicksburg boasts one of the finest sash and blind factories in the South.

Scranton has a good shipyard, where vessels are hauled out, built or repaired economically and expeditiously.

Meridian has a hominy manufactory that does a large jobbing trade on the many lines of railroad that cross or connect at that city.

The Jackson furniture factory was among the first establishments in the country to utilize the gum tree which grows so abundantly in all parts of the State and will be the great furniture hard wood of the future.

Several years ago Mr. A. A. Maginnis at Ocean Springs on our South coast experimented with the Italian Olive, and established the fact that it would thrive in the pine lands near the gulf, bearing abundant fruit five years after planting, and that the culture would be very profitable. Little has been done in this line, however, as the orange craze took possession of those who were willing to put capital into a pursuit where so much time intervened between seed time and harvest. Lands in this vicinity a mile or so back from the beach can be purchased for a trifle, and we know of no business that promises greater rewards to persons of small capital who have "learned to labor and to wait," than olive culture in South Mississippi.

The gulf mullet, which abounds in the waters off the Mississippi coast, suggests an industry that is likely to be soon developed. As an article of diet it is fully equal to the mackerel of the New England waters, and the facilities for catching them can be much more economically provided, while the great salt mines of Louisiana that supply the packing houses of Chicago and Kansas City are of easy access to the entire gulf coast.

The Natchez cotton mills which were stopped last month by a destructive boiler explosion, resumed operations on the 22d inst. Many important improvements and additions have been made. We congratulate the several hundred employees upon release from enforced idleness.

Trinity Episcopal Church, of Natchez, is building a beautiful hall as a memorial to its late rector, Rev. Alexander Marks. It promises to be one of the handsomest structures in the State.

Yazoo City is building a new fire-proof cotton warehouse with a capacity of 10,000 bales. It will be completed in time for the fall business.

Swain & Co., of Yazoo City, have completed their new grist mill, and are prepared for a heavy valley business. The railroad has run a switch to the mill.

The oyster culture industry is expanding to such an extent on the south coast of the State and its islands, as to induce the Pascagoula Star to say: "If this industry is carried to anything like the extent the planting grounds will justify, Mississippi sound will be able to supply the whole country with the finest and cheapest oysters in the world, for our cultivated oysters are perfectly magnificent in size and flavor."

The Baratara Canning Factory Company, of Biloxi, three years ago planted 800 acres with "dead shells" between Biloxi and Deer Island, at an estimated cost of \$2,500. Spawn fastened at once upon these shells, and a recent survey by Mr. J. T. Maybury justifies him in estimating the clear profit as the plant now stands at \$50,000, on a total expenditure of \$4,000.

A contract for the erection of eighteen section houses on the line of the Vicksburg, Shreveport & Pacific Railroad has been let, and the framing is all to be done at the Meridian Planing Mills.

Meridian is endeavoring, with fair show of success, to organize a company to bore for natural gas in that city or vicinity.

Yazoo City is agitating for an artesian well, and the probability is that the experiment will soon be tried.

Aberdeen has many splendid outpouring artesian wells. Four of these supply hydrants at centres of street crossings, and several others supply the water for factories, creamery, ice factory, etc. The tanks for the Mobile & Ohio and the Aberdeen branch of the Illinois Central at Aberdeen are each supplied with water from artesian wells that throw the stream from 15 to 20 feet above the surface in never-failing volume.

Columbus has several very fine outpouring artesian wells, and there is also a fine one at Tupelo.

Messrs. Poitevant & Favre, the lumber kings of the South, made the following foreign shipments from their mills at Pearlinton last week: To Tampico, 105,000 feet; to Progresso, 150,000 feet; to Aspinwall, 600,000 feet. Three other vessels were in port loading from these mills when this report was made.

Mr. W. J. Parker has gone into the Le Conte pear business on an extensive scale at Orange Grove on the South coast, and the remarkable growth of his trees is creating a perfect pear furor in that vicinity.

The Pascagoula Star reports the oysters in that vicinity as "fat, fine and abundant."

The receipts of products from the South coast of Mississippi by New Orleans for the week ending August 18th footed up as follows: 1,095,000 feet of lumber, 44,000 laths, 184,000 brick, 1,240 barrels rosin, 54 barrels turpentine, 4,250 barrels white sand, 146,500 white oak staves, 16,100 barrels of charcoal, 135,000 shingles, 225 barrels shells and 276 cords wood.

Mississippi capitalists have been among the largest investors and gainers in the real estate operations at Birmingham, Chattanooga, Sheffield and other "booming" centers of Alabama and Tennessee. Meridian, Aberdeen and Columbus have been particularly fortunate in their investments in those localities.

Mr. Albert Leary, who has recently moved to Clay county, near West Point, from Kansas, has recently imported some fine Norman horses and mares, and will devote his attention to raising that breed.

Mr. Robert Brown, of Prairie Station, Monroe county, the pioneer in America in saving the seed of the *Lespedeza striata* or Japanese clover, writes us that he expects to harvest enough this season to supply all demands.

If the weather favors there will be an enormous crop of turnips made in Mississippi this year.

The Board of Mississippi Levee Commissioners for the Greenville district will open proposals at that town on the 12th of September for 764,000 cubic yards of new work and 954,400 yards of enlargement work. Bids must be made in duplicate, and for payment in cash or in the six per cent. bonds of the Levee Board. Payments made monthly.

The canneries at Biloxi, on the south coast, are putting a new line of goods on the market—"Mexican Mackerel." They are meeting with rapid sale.

The baskets used in picking cotton in Mississippi are made of white oak splits, and on every plantation in the State their manufacture is going on.

Every paper in the State chronicles the receipt of cotton of the new crop at its town in advance of last year's date.

In speaking of the employees in the Natchez cotton mills, the Democrat, of that city, says: "The class of help employed in these mills is superior in every respect. Indeed, it is chiefly made up of the girls from our city and county who have the pride and ambition to earn their own livings." This is characteristic of all the Mississippi cotton and woolen factories.

The South Mississippi Fair will commence at Summit on October 31 and last six days.

The editor of the Ripley Sentinel was presented with a 70 pound watermelon last week.

Gen. Stephen D. Lee, president of the A. and M. College of Mississippi, near Starkville, is the president of the Grass Growers' & Hay Makers' Association of Mississippi. In view of the short hay crop made in the North and West, it might pay readers to address him. He represents the producers of tens of thousands of tons of surplus hay who are anxious to be piloted to a market.

Track laying commenced at the coast terminus of the Gulf & Ship Island Railroad last week, and will be pushed northward through the virgin pine forests with the greatest expedition. 800 tons of rails have already been delivered.

The merchants of Starkville are erecting a fine new fire-proof cotton warehouse midway between the two railroad depots. What is wanted now in that enterprising town is a steam cotton compress. Starkville has a national bank.

Col. W. B. Montgomery, the great Jersey cattle farmer of the South, has mowed his meadows in Oktibbeha county three times this season, and expects to obtain a good fourth crop. He has also saved forty bushels of seed.

The annual horse and mule show of the Stockgrowers Association, of Lowndes and Oktibbeha counties, commences at Mahew on September 1st. The exhibit promises to be very fine.

Florida Sub-Tropical Exhibition.

JACKSONVILLE, FLA., August 18, 1887.

Editor Manufacturers' Record:

The contract for the main building for the Sub-Tropical Exposition has just been awarded to a syndicate of working mechanics here, with A. E. McClure, architect, at the head. The work is already under way, and will be energetically pushed. The style of architecture of the design is Moorish, which gives the building an imposing effect. When completed, the main building of the Florida Sub-Tropical Exposition will be one of the most handsome pieces of architecture ever erected in the South for exposition purposes. The dimensions of the main building are 307.6 feet by 134 feet, by 55 feet high. The estimated cost is \$35,000. The public interest in the success of the exposition is very general throughout the State, and visitors to the Sub-Tropical next winter will see a grand display of Florida's resources, embellished with a wealth of tropical and semi tropical foliage and flowers from the evergreen State and the islands of the old Spanish Main.

JAMES H. PAINE.

THE Anniston Inn, at Anniston, Ala., is one of the best managed hotels in the South. The owners of the Inn did a wise thing in securing the services of so competent and experienced a hotel man as Mr. Harry Hardell. His judgment and tact and business sagacity, and his unceasing efforts in behalf of the comfort and welfare of those who seek shelter beneath his hospitable roof, have secured an enviable reputation for the Inn.

THE News of August 14, in its annual summary of building improvements going on in Dallas, Texas, shows that the amount of money invested in buildings just finished or in course of construction is \$1,274,805, as against \$1,157,125 the previous year. This is a fine showing for Dallas. The large number of residences being erected signifies an active demand for homes.

A New England cotton mill expert who has faith in Southern cotton mills advertises in this issue under the heading of "Answers Wanted to This," offering to take an interest in a good cotton mill of 10,000 spindles or more.

Enlarging Copper Works.

BALTIMORE, MD., August 18, 1887.
Editor Manufacturers' Record:
 We are enlarging our works.
 BALTIMORE COPPER S. & R. CO.

Erecting Saw Mill.

BEEBE, ARK., August 15, 1887.
Editor Manufacturers' Record:
 I am erecting a steam saw mill at Beebe, Ark., with a capacity of 15,000 feet per day of oak and gum, and will be in operation by the first of September. A. T. PHILLIPS.

Contemplate Building Street Railroad.

ATLANTA, GA., August 20, 1887.
Editor Manufacturers' Record:
 Have just applied for charter for street railroad to use steam power from this city to Decatur, Ga., six miles distant and back, forming a U. The country thickly settled between the two points, and think the project entirely feasible. Have not organized yet, as we cannot do so unless charter is obtained. J. C. KIRKPATRICK.

To Build the Augusta & Chattanooga Railroad.

AUGUSTA, ALA., August 20, 1887.
Editor Manufacturers' Record:
 A construction company is now being organized for the express purpose of immediately building the Augusta & Chattanooga Railroad. The road will be about 240 miles long, running through the richest section of our State, and making close connection between Augusta and Chattanooga. J. P. VERDEY.

To Build a Canal.

RESACA, GA., August 20, 1887.
Editor Manufacturers' Record:
 A company of citizens in surrounding vicinity have organized to build a canal under the name of the Resaca Canal & Manufacturing Co. S. H. BROWN.

New Machinery.

SATSUMA, FLA., August 18, 1887.
Editor Manufacturers' Record:
 We have bought out the mill and timber lands in connection with saw mill, and are replacing the old machinery with the best that can be made by the Stearns Manufacturing Co., of Erie, Pa. We intend to be in operation in about six weeks. SATSUMA LUMBER CO.

New Factories.

WINCHESTER, TENN., August 19, 1887.
Editor Manufacturers' Record:
 The Winchester Manufacturing Co. has been incorporated, with capital stock at \$28,000, and now has in course of erection a story. Intend to start about the first of October. When in full operation will employ about 300 hands. J. S. VAUGH & CO., of Geayville, Ill., will remove their box factory to this place this fall; they employ about 65 hands, and a machine shop is sure to come. WINCHESTER MFG. CO.

RALEIGH, N. C., August 20, 1887.
Editor Manufacturers' Record:
 We have under consideration plans for the North Carolina College of Agriculture & Mechanic Arts. Plans for a plant which will cost ultimately \$50,000 will be prepared by Mr. C. L. Carson, of Baltimore. Work will be commenced on the first of the proposed buildings as soon as possible after the plans shall have been received. Instruction will be given to 120 students free, and the faculty allowed discretion thereafter in filling the college. W. S. PRIMROSE, Chairman.

Gadsden Car Works.

GADSDEN, ALA., August 16, 1887.
Editor Manufacturers' Record:
 Our car factory will be completed and turning out cars by January 1, 1888, and will employ 200 skilled mechanics. THE GADSDEN LAND & IMPROVEMENT CO., M. L. FOSTER, Secretary and Treasurer.

CARTERSVILLE, GA., August 10, 1887.
Editor Manufacturers' Record:
 Myself and L. S. Mumford have purchased a good iron mine and leased two others near Rockmart, Ga. These were purchased and leased for ourselves individually, and not for others. D. W. K. PEACOCK.

CORPUS CHRISTI, TEXAS, August 18, 1887.
Editor Manufacturers' Record:
 The city of Corpus Christi proposes to have an artesian well bored, which will give water enough for the present use of the city, the party contracting to get water or no pay. If the well succeeds then they propose to put pipes to lead the water throughout the town. Contract for the well has not yet been let, though they are in correspondence with parties who will probably take it. M.

MURFREESBORO, N. C., August 17, 1887.
Editor Manufacturers' Record:
 The Murfreesboro Railroad Company was organized August 12, 1887, and will commence the construction of the road in September or October. I am the president of this company. B. B. WINBORNE.

Water Works Contemplated.

CLARKSBURG, W. VA., August 17, 1887.
Editor Manufacturers' Record:
 A vote will be ordered by the council to decide whether or not to issue bonds with which to erect water works. It requires three-fifths to carry. The proposed capacity of reservoir is one million gallons, supplied from river by a pair of direct acting steam pumps into a reservoir on a hill by the town that will give us force to throw water over 100 feet high from several inch nozzles. W. F. RICHARDS.

Bessemer Steel Plant.

LITTLE ROCK, ARK., August 20, 1887.
Editor Manufacturers' Record:
 A company has been organized for the purpose of erecting Bessemer steel works, at Antimony City. E. A. Bayrd, president; Merrill Watson, secretary, both of St. Louis; Wm. F. Roberts, manager, of Antimony City, Ark. E. A. MERRIMAN.

Will Build a Hotel.

CHADBOURN, N. C., August 19, 1887.
Editor Manufacturers' Record:
 The new hotel which is to be erected here, opposite the depot, on the highlands, is to be controlled by Mr. J. A. Brown, who will begin the erection early in the fall. It will be a large three-story structure. J. H. CHADBOURN.

Will Build \$30,000 College.

LEXINGTON, KY., August 15, 1887.
Editor Manufacturers' Record:
 The Kentucky Wesleyan College will be built at Winchester, Ky., during the ensuing year at a cost of about \$30,000. J. C. WOODWARD.

Will Add an Incandescent Plant.

CHARLESTON, S. C., August 21, 1887.
Editor Manufacturers' Record:
 The Charleston Light & Power Co. will add at once an incandescent plant of the alternating system to their present arc light plant. C. L. & P. CO.

Bids Invited for Building Bridges.

FRONT ROYAL, VA., August 18, 1887.
Editor Manufacturers' Record:
 I am a committee to invite bids on the early contemplated construction of bridges over the North and South branches of the Shenandoah river, at Riverton, Warren county, Va.; stone and iron bridges generally preferred. M. L. GARRISON.

Bids Wanted for Building School.

BIRMINGHAM, ALA., August 19, 1887.
Editor Manufacturers' Record:
 We are receiving bids for a \$40,000 school-house, with all the modern improvements, with the Smead-Rutlan heating apparatus and dry closet system. We are also receiving bids for a \$225,000 courthouse for Jefferson county. GEO. L. THOMAS, County Commissioner.

Wants to Move South.

IRONTON, OHIO, August 17, 1887.
Editor Manufacturers' Record:
 I have purchased the Eberhardt Stove Foundry, of Portsmouth, Ohio, and am hunting for a suitable location in the South to locate. I have a complete line of heating and wood and coal cook stoves, and make 85 different stoves, and hollow-ware, grates, feeders, etc., shafting belting, gearing, pulleys, engines, boilers, emery stands and grinders, and a stove foundry complete in every respect. New patterns; good to work 50 men. Will put the entire property into a new company and take it in stock if \$25,000 cash capital can be put in by the Southern people. It is one of the best equipped stove foundries in the North, and I am sorry to say I have to find a new location. JAMES F. PETERS.

Iron Furnace Projected.

ROME, GA., August 16, 1887.
Editor Manufacturers' Record:
 The land company wants a furnace to cost \$100,000. The company subscribes \$25,000, the citizens will take \$25,000 and we want a first-class successful iron man who will take \$10,000 to \$25,000 stock and manage the furnace. The funds (balance of \$100,000) will be raised by bonds. None but first class man need apply. J. W. ROUNSAVILLE, President.

A Suggestion to Architects.

CHIPLEY, FLA., August 15, 1887.
Editor Manufacturers' Record:
 Will you kindly suggest to young braing architects that there is a demand here, and all over the South, for low cost hotel designs, hotel to cost say \$2,500 to \$5,000, suited to this section of country, where suitable lumber costs \$5 to \$8 per thousand feet. An architect who will furnish such designs and make the fact known through your extensively circulated journal will receive orders from all over the South. This class of architecture is neglected. W. T. THOMAS.

Additional Pumping Machinery.

HENDERSON, KY., August 20, 1887.
Editor Manufacturers' Record:
 The council has authorized the commissioners of the water works to put in another pit and auxiliary pump. The pump will be one of the duplex makes, with capacity of 1,000,000 gallons in 24 hours. The improvements will cost about \$7,000 or \$8,000. JAS. P. WIGAL.

NEWNAM, GA., August 18, 1887.
Editor Manufacturers' Record:
 We have awarded contracts for fitting up our ginnery and a complete corn mill at Grantville. We have ample power for cotton seed oil mill and may add one later. R. D. COLLE, Sr., Director.

Will Receive Bids for Building Hotel.

ROME, GA., August 22, 1887.
Editor Manufacturers' Record:
 I will receive bids for building my hotel at this place—first story granite, other four brick. R. T. ARMSTRONG.

Building Iron Furnace.

TRUSSVILLE, ALA., August 22, 1887.
Editor Manufacturers' Record:
 We have organized a land company at this place known as the Trussville & Cahaba River Land Co., and propose to build iron furnaces, rolling mills and all other similar enterprises. We have under construction iron furnace which will blow in in about four months. D. N. TALLEY.

To Build Water Works.

MARION, VA., August 22, 1887.
Editor Manufacturers' Record:
 Our city on the 13th inst. voted to build water works. The supply will be brought from a spring two miles off in a pipe not over six inches. W. D. STROTHER.

JOHNSON CITY, TENN., August 22, 1887.
Editor Manufacturers' Record:
 The contract for laying the iron on 103 miles of the Chicago, Cincinnati & Charleston road between Black's and Camden, S. C., has been let to Messrs. Taylor & Elmer, of New York, and was commenced this week. It will be completed by January 1, 1888. An engineer corps will locate the line through this place next month, and dirt will be broken in October. C. H. LYLE.

Big Mining Enterprise.

SALISBURY, N. C., August 21, 1887.
Editor Manufacturers' Record:
 The Herald of this week will contain the following: The Sam Christian Mine, Montgomery county, N. C., has been sold to English parties. A company has been formed with a capital of £200,000, of which £50,000 is to be paid up at once. They mean to spend £50,000 on the property—£30,000 to erect powerful pumping plant on the Yaddin, with flumes to carry the water three miles to reach the property. THEO. BURBAUM.

New Machinery.

BRISTOL, TENN., August 22, 1887.
Editor Manufacturers' Record:
 We are adding to our plant of machinery a 60 horse-power boiler, 12x14 foot engine, and an 8-foot rotary veneer cutter. This will increase our capacity to 100,000 feet of 1/4 inch lumber per day. CLINCH RIVER VENEER CO.

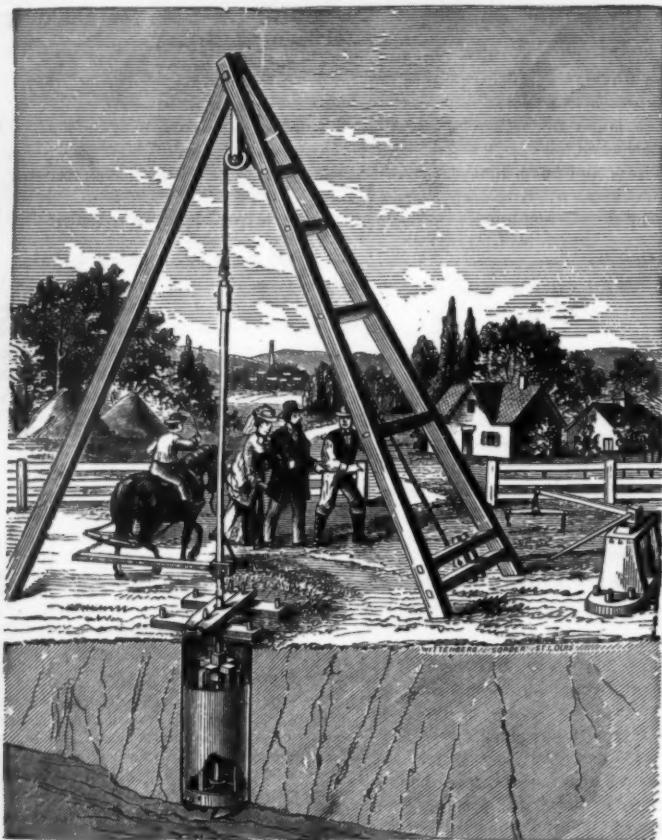
SPARTANBURG, S. C., August 19, 1887.
Editor Manufacturers' Record:
 The Spartanburg Land Improvement Co. has been formed to engage in buying and selling real estate, building street car line, electric light, &c. The capital is \$100,000. Real estate is on a rapid advance, and increase of business unprecedented. JNO. B. CLEVELAND.

Building Large Roundhouse.

MOBILE, ALA., August 17, 1887.
Editor Manufacturers' Record:
 I have started building a roundhouse for the Mobile & Ohio Railroad; the cost of same about \$40,000. The City Railroad Co. have made contract for the enlargement of their stables on Royal street. These stables when complete will be two stories high, 108x300 feet long; cost \$10,000. GEO. T. LYNDALL.

LAKE CITY, FLA., August 16, 1887.
Editor Manufacturers' Record:
 A. B. Hart will soon open up his crate factory. P.

WANTED. A SITUATION in the South where hard or soft wood is abundant and freights reasonable, for the erection of a large band and circular saw mill, with moulder and other machinery. Supply must average 30,000 feet daily. Address, BAND SAW, CARE MANUFACTURERS' RECORD, BALTIMORE, MD.



The VICTOR PATENT WELL AUGUR MACHINE.
Will bore through any kind of substance, except hard rock. Made and furnished complete in sizes as follows: 10 inches up to 4 feet in diameter, namely—10, 12, 14, 16, 18, 20, 22, 24, 26 and 48 inches.

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Western Forge & Tool Works,
1222 Collins Street, ST. LOUIS, MO.

Send for Catalogue.

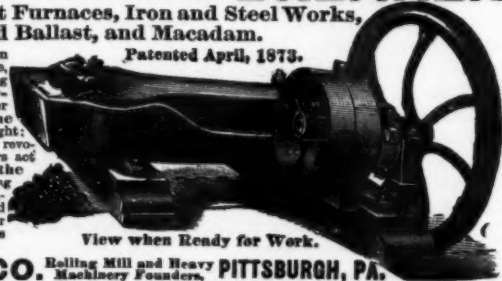
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FORSTER'S STONE AND IRON ORE BREAKER

VERY SIMPLE AND VERY DURABLE.
For Mining, Blast Furnaces, Iron and Steel Works,
Railroad Ballast, and Macadam.

Patented April, 1873.

Lever moves horizontally. Can be operated with horse, mule, water or steam power. Owing to Great Gain in Leverage, we do the work of other Crushers with one third the power and one half the weight; and as we crush twice in a revolution, where other Crushers act but once, we do double the quantity. In Fine Crushing for Stamps, Burrs, or Finishing Mills, we can do more and Finer Work than has ever been attempted. For prices and testimonials, address

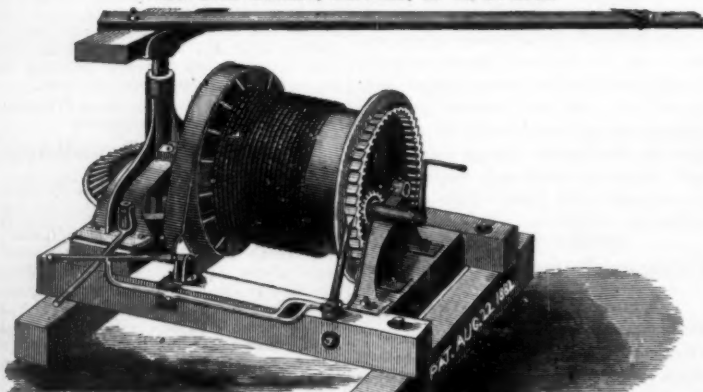


View when Ready for Work.

TOTTEN & CO. Rolling Mill and Heavy PITTSBURGH, PA.
Machinery Founders.

THE CONTRACTORS' PLANT MANFG. CO.

129 ERIE STREET, BUFFALO, N. Y., U. S. A.



The illustration represents a Horse-Power Hoisting Whim. It is designed for mining purposes, or raising coal or water out of a shaft. It will raise a bucket or weight weighing seven hundred pounds seventy-five feet per minute. The machine is made entirely of iron and steel excepting the sills, and is not affected by dry or wet climates. The hoisting drum is under complete control of the man at the shaft, landing the bucket by operating the levers at hand, and by which means the drum can be thrown in and out of gear at will when the horse is in motion, or the bucket lowered by the brakes as safely and conveniently as by a steam power hoist. No clutches to throw out or in gear. The drum will carry 500 feet or more of $\frac{3}{4}$ inch steel wire rope. The machine is **SMALL, LIGHT, EASILY HANDLED** and **DURABLE**, sufficiently strong to do the desired work, and so perfectly simple that it can be readily understood by any miner or person inexperienced with machinery. There is a safety attachment on the end of drum in case of an accident, the dog always being in gear when the bucket is being raised. Easily transported; can be made in sections small enough for mule-back transportation if desired.

We Also Manufacture Horse-Power Hoist for Railway Contractors, Bridge Builders and Quarrymen.

Correspondence Solicited. Illustrated Catalogue furnished on application. Mention this paper when you write.

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Manufacturers' Record Co., PUBLISHERS
BALTIMORE, Maryland



THE PREMIER FLOUR OF AMERICA.

Patapsco Flouring Mills.

ESTABLISHED 1774.

The value of Flour depends upon the essential elements of nutrition contained in the bread it makes. Maryland and Virginia Wheat, from which our **PATENT ROLLER FLOURS** are chiefly manufactured, has long been conceded to be of most superior quality, because it has a better combination of gluten and phosphates than any other. This fact is recognized, not only in this country, but in the United Kingdom as well, where the "PATAPSCO SUPERLATIVE" commands decidedly more money than any other American Flour, thereby clearly demonstrating its superior qualities for making the whitest, sweetest and most nutritious bread.

ASK YOUR GROCER FOR IT, ALSO FOR

PATAPSCO FAMILY,
CAPE HENRY FAMILY,
PATAPSCO EXTRA,

NORTH POINT FAMILY,
CHESAPEAKE EXTRA,
BEDFORD FAMILY,

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The True Idea of Assurance.

Women's Mutual Insurance and ACCIDENT COMPANY.

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JOHN A. KAMPING, Attorney and Counsel, 198 Broadway, New York.
Incorporated under the Laws of New York.

ITS OBJECT.
This company is the pioneer in throwing down the bars of unjust discrimination against women in life insurance. Statistics and common observation prove mortality to be in favor of females at every age, and married as well as single. To remove this prejudice, and to secure to women an equal estimation in her insurability, the promoters of this enterprise have devoted themselves. Consistently with this principle **WOMEN AND MEN** are equally insured in this company without discrimination on account of sex.

ITS MEMBERSHIP
comprises persons between the ages of 18 and 60, of approved physical condition. The Life Class is separate and distinct from the Accident Class, members being liable for losses only occurring in the class to which they belong.

ITS PLAN
secures insurance at cost, and embraces the best features of similar associations, with such improvements added as enlightened experience has shown to be desirable for the member's advantage and the security of the association.

ITS SAFETY AND SECURITY
consists in its **ECONOMICAL** system, its **IMPOSSIBILITY** of insolvency, and its **SECURITY RESERVE FUND**.

FINALLY.

This company avoids complicated schemes and plans by means of which impossible results are promised. Its contracts are plain, easily fulfilled and liberal. It issues the following forms:

1. Ordinary Life Policy, \$100 to \$10,000.
2. Ordinary Accident Policy, \$5,000 death indemnity; \$25 weekly.
3. Combined Life and Accident Policy.
4. \$500 Savings Bond.

BANKERS:
BANK OF THE METROPOLIS, New York City.
DEPOSITORY OF RESERVE FUND:
FARMERS' LOAN AND TRUST CO., New York City.

The officers would be pleased to furnish any further particulars which may be desired in relation to the Company's affairs, or the way to obtain a policy.
Agents are desired in every city, village and district throughout the healthful sections of the country.
Address all communications to the

WOMEN'S MUTUAL INSURANCE AND ACCIDENT CO.,
128 BROADWAY, NEW YORK.

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Color Work
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Fine Commercial Engraving
Are Unsurpassed.

All work executed under careful

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consistent with first-class pro-

ductions. Sole proprietors of the

CELEBRATED

LITHOCAUSTIC PROCESS

Branch Establishment:

Hoen Building, RICHMOND, VA.

ESTABLISHED 1835.



THE HOEN BUILDING

Chesapeake & Ohio Route.

Solid Trains from Washington.

LEAVE WASHINGTON, B. & P. STATION:

11.20 A. M. **Virginia Springs Express** for Rockbridge, Alum, Warm, Hot, White Sulphur and other Springs Resorts of the Alleghenies.

5.30 P. M. **Louisville and Cincinnati Express.** Pullman Cars and a Solid train to Louisville and Cincinnati, making all Western and Southwestern connections.

Washington Ticket Office,

513 Pennsylvania Avenue,

FRANK TRIGG, Northeastern Passenger Agt

JOHN HUIR,
General Traffic Manager.

H. W. FULLER,
General Passenger Agt.

LOOK THROUGH the advertising pages carefully. They contain the announcements of the largest and most reliable houses in the country manufacturing and dealing in machinery of all kinds, mill, factory, mine and railroad supplies, hardware, roofing, builders' material, etc. If in need of anything herein advertised, write to the advertisers for catalogues, prices, &c.

LEETONIA BOILER WORKS CO.

MANUFACTURERS OF

Locomotive, Fuel and Portable

BOILERS

BLAST FURNACES, PRISON WORK,

Oil Tanks and Sheet Iron Work. Repairing Promptly Attended to. Write for Estimate
LEETONIA, OHIO.**DAVIS PRESSURE REGULATOR**

ADAPTED TO
Heating Apparatus, Dryers, Sashers, Jacket Kettles, Air and Water Pumps, Hydraulic Elevators, Glue Kettles, Worms for Distilling, Chemical Works, Sugar Refineries, Dye Houses, Rubber Works, Distilleries, Breweries, Bleachers, Drying Kilns, Paper Mills, Rubber Works, Vitrol Works, Soap Factories, etc., or manufacturing requiring a CONSTANT, UNVARYING PRESSURE below that of the boiler.

G. M. DAVIS & CO., Chicago.

**PAGE BELTING COMPANY,**

SECTION OF COPPER WIRE-SEWED LIGHT DOUBLE BELTING.

We Manufacture
ple and special grades

Also the "Hercules" Lacing

The Hercules is a

lacing; combines

Raw Hide and of

Send for Catalogue

Belting to use for Dif-

all the sta-
of Leather Belting.

and the Patna Brand Lacing.

chanically made; is a buffed

the good qualities of ordinary

Page's Patent. Try it.

No. 21 and "Kinds and Grades of

Various Kinds of Work."



CONCORD, N. H. U. S. A.

SPARGER'S White Heat Steel Welding Compound.

- It is superior to borax or anything else.
- It will weld steel to steel as easily as iron is welded to iron.
- It will restore steel when burned.
- It both welds and refines at the same time.
- It never misses welding when heated hot enough.
- It does not waste away steel as does borax and other compounds.

Any tool cracked in tempering can be welded by one application, and I positively guarantee that steel will not crack after it has been worked in the compound. Testimonials of its efficacy in hand from practical machinists in New York, Pittsburgh, Newark and other cities. Sold in bulk at 5 cents a pound. Address

W. A. SPARGER, Bristol, Tenn.

Shafting, Hangers.Castings of every
Description made.Stationary, Distillery
Mill and Boiler Work.

JNO. N. MAROQUETTE, 118 W. Falls Ave., BALTIMORE, MD.

SAVE YOUR POWER!

Prevent your Belts from Slipping by using

The National Pulley Covering.

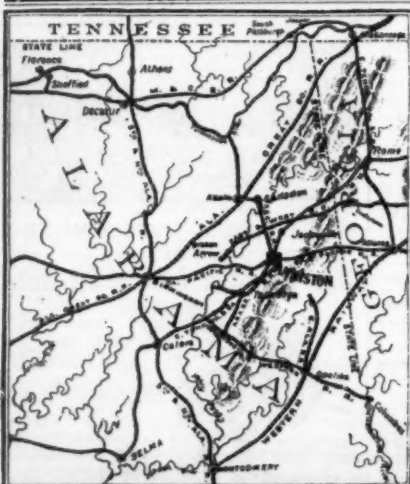
EASILY APPLIED, CHEAP, EFFECTIVE.

No Rivets; can be put on by any one. Satisfaction Guaranteed.

Send for Circulars with Prices.

The National Pulley Covering Company,

BOWLY'S WHARF and WOOD ST., - - BALTIMORE, MD.



REFERENCES:

First National Bank, Anniston, Ala.
Col. John M. McKleroy, Pres., Anniston City Land Co.

**IMPORTANT
To Wharf Owners.**

THE PATENT PILING PROTECTOR CO., BRUNSWICK, GA., is prepared to protect piling from the Terebo and other Marine Pests in any Harbor in the United States, and will erect its plant, which is inexpensive, in any Harbor where a contract is offered, and prepare piling from the timber near at hand. The process is thoroughly effective, indestructible in salt water, and protection for ten years guaranteed. Is fully protected by letters patent. Has been tested for six years; is better than metal covering; as good and for piling in some respects better than creosoting; costs less than one-half as much as metal covering or creosoting. Circulars fully explaining process will be sent upon application. Correspondence solicited.

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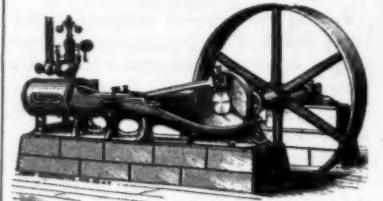
C. P. GOODYEAR, President,
BRUNSWICK, GEORGIA.

Bates' Hand Elevators.
Patented April 18, 1871. Released July 20, 1878.
OVER 6,000 IN USE.

Adapted for Warehouses, Stores, Factories, Hotels, Public Institutions, and every place where merchandise, &c., is transferred from one story to another.

JAMES BATES, Patentee,

Nos. 1 3 & 5 President Street. BALTIMORE.

The "MOGUL" Engine.

NEW DESIGN.

Bearings extra long, compact, simple, strong, durable, and of

Superior Workmanship and Materials.

The BEALL Engine, Boiler

AND MACHINE WORKS,

MERWIN MCKAIG.

CUMBERLAND, MD.

MANUFACTURERS OF

The "MOGUL" Engines.

Pulleys, Shafting, Couplings, Collars &c. Pulley Turning Machines, Pulley Boring Machines, Shafting Lathes, Shafting Straighteners and Cylinder Boring Machines. Send for low price-lists and big discounts

ROOT'S NEW IRON BLOWER

POSITIVE BLAST.

IRON REVOLVERS,

PERFECTLY BALANCED.

Has fewer parts than any other Blower. Also, Blacksmith Blowers, Portable Forges, Tugers, Irons, and Gas Exhaustors.

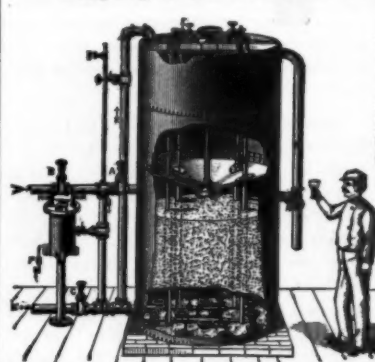
P. H. & F. M. ROOTS, Manufacturers,
CONNERVILLE, IND.

Send for Priced Catalogue.

No. 7 CANAL STREET.

HYATT PURE WATER SYSTEM.

Adapting Nature's Process—Endorsed by the Highest Authority.

**A Perfect Water Purifying System.**

A thousand or more in use by Cities, Towns, Water Companies, Factories, Mills, Steam Boilers, Public Institutions, Private Residences.

Indispensable to Textile Manufacturers.

Adapted to every condition requiring Clean, Bright Water in any quantity. Perfect in Operation, Quickly Cleaned Automatically, Reliable, Indestructible.

Muddy Water Made Clean.**HARD WATER MADE SOFT.**

Organic and semi-soluble elements removed. Scale and Mud Deposits in Boilers. Removed. HAS NEVER FAILED.

Promised Results Guaranteed.

Adopted by Somerville & Harlan N. J. Water Co.; City Water Co., Belleville, Ill.; Water Works, Charleston, W. Va.; Clark Thread Works, Newark, N. J.; Earl & Wilson, Troy, N. Y.; Norfolk & N. B. Hosier Co., New Brunswick, N. J.; Victor Knitting Mills, and sixteen other knitting mills, in Cohoes, N. Y.; Hon. Daniel Manning, Albany, N. Y.; Western Steel Works, St. Louis, Mo., and hundreds of others. For Circulars, Prices, &c., Address

HYATT PURE WATER CO., Tribune Building, NEW YORK

**LEDBETTER & CO.
LAND AND LOAN ASSOCIATION.**

Incorporated.

Commission Dealers in

Lands, Stocks and Bonds.**— CITY AND MINERAL PROPERTY —**

A SPECIALTY.

Capital Stock

\$100,000

CORRESPONDENCE

SOLICITED.

**ANNISTON, ALA.**

THE

Hercules Water Wheel

IN THE SOUTH.

WHAT SOUTHERN USERS SAY OF THE HERCULES.

There is probably no higher authority in the South on water wheels than Mr. John Hill, civil and mechanical engineer, of the great Eagle & Phenix Cotton Mills, at Columbus, Ga. Read what he says of the Hercules Wheel.

The Best Wheel We Have.

JOHN HILL, CIVIL AND MECHANICAL ENGINEER,
Reference—Eagle & Phenix Mfg. Co.

COLUMBUS, GA., April 30, 1887.

As to my opinion of the Hercules Wheel, will say: In our mill (the Eagle & Phenix) we have twenty-one (21) water wheels of various kinds, three of them being Hercules. I regard the Hercules as being by far the best wheel of any we have. It is the best in workmanship, absence from repairs, large per cent. in power, and in general satisfactory results. I know of no wheel its equal. At Holyoke, testing flume a few weeks since. I personally witnessed a test of a Hercules of the ordinary construction, which gave 83 96-100 per cent. of efficiency.

Yours truly,

JOHN HILL.

Cannot Speak too Highly of the Hercules Wheel.

JAMES RIDDLE, SON & CO.
Brandywine Cotton Mills.

KENTMERE, DEL., April 27, 1887.

In reply to your inquiry as to the working of a "Hercules Water Wheel" now running at our mills, would say that we put in nearly two years ago a 39-inch Hercules Wheel, running under a 144-foot head. It is driving up to full regular speed three hundred and three heavy looms, with only half gate. We are about to enlarge the weave mill and add three hundred more looms, which will be driven by the same wheel. We cannot speak too highly of the Hercules. It has absolutely run without cost or derangement since it started, and has given eminent satisfaction in every way.

Yours truly,

JAMES RIDDLE, SON & CO.

Perfectly Satisfactory in Every Way.

PORTER WOOLEN MILL.

J. H. Porter, President. J. W. Robertson, Gen. Manager.

CLARKSVILLE, GA., April 29, 1887.

In reply to enquiry as to my opinion of the Hercules Turbine Water Wheel, say: I have put in two, one about

six years since, and the other in 1883, and think so highly of the wheel that I shall use another in cotton mill this company is now constructing. Neither of the wheels alluded to have given the slightest trouble, and their working has been perfectly satisfactory in every way.

Yours truly,

J. W. ROBERTSON, Gen. Man.

The Hercules Wheels Have Given Perfect Satisfaction.

ROSSELL MANUFACTURING CO.

Sheetings, Shirtings, Checks, Yarns, &c.

ROSWELL, COBB COUNTY, GA., April 29, 1887.

In answer to yours of 25th inst., asking our opinion of the Hercules Wheel, will say our experience is as follows: In our new mill, built about four (4) years ago, we put a 30-inch Hercules Wheel, under a 21-foot head of water. It has given such satisfaction running this (5,000) five thousand spindle mill, that last summer, when we were compelled to put in a new wheel at our old mill, running 7,000 spindles, looms, twistings, &c., we put in a 36-inch Hercules Wheel, under a 27-foot head of water. All I can say is we have surplus power in both mills, have lost no time by any defect of wheels, and if we were putting up any more mills, would use the Hercules Wheel. They have given us perfect satisfaction.

Yours respectfully,

F. J. MINHINNETT, Prest.

A Good Wheel, and Has Given Good Satisfaction.

PEE DEE MANUFACTURING CO.

Plaids and Warps.

ROCKINGHAM, N. C., April 30, 1887.

We have been using the Hercules Water Wheel for more than six years. Our superintendent says it is a good wheel, has given good satisfaction, and its performance is equal to the claims of the maker. We have a head of 17 feet. Our wheel has a diameter of 30 inches. Under this water pressure the wheel has moved 4,000 spindles and the needed preparation, and 164 plaid looms. The above includes the dye house, machine shop and all other machinery which we employ.

Very respectfully,

WALTER L. STEELE, Prest.

Best Wheels I Have Ever Seen.

MARIETTA PAPER MANUFACTURING CO.,

Book, News and Wrapping Papers.

MARIETTA, GA., April 30, 1887.

In reply to your favor of the 25th inst.: I am using four Hercules Water Wheels, two 12-inch, one 24-inch,

and one 30-inch. They have given me perfect satisfaction, and I think that they are the best wheels that I have ever seen.

Yours truly,

S. A. ANDERSON.

Has Never Given the Slightest Trouble.

PACOLET MANUFACTURING CO.

Jno. H. Montgomery, Prest. and Treas.

PACOLET, S. C., April 29, 1887.

Replying to yours of 25th, would say: We have a 54-inch Hercules Water Wheel running, under 20 foot head, 12,000 spindles and 338 looms, with other necessary machinery. Has been running about three and a-half years, and has never given us the slightest trouble; not an hour's stoppage during the whole time.

Very truly yours,

JNO. H. MONTGOMERY, Prest. and Treas.

Well Satisfied With It.

WM. J. RUSSELL,

Manager Princeton Factory.

ATHENS, GA., April 28, 1887.

I have used the "Hercules" wheel since 1881, and am so well satisfied with it that I should not purchase any other if in want of a first-class wheel. It does all the manufacturers claim for it.

Yours truly,

WM. J. RUSSELL, Manager.

Has Given Entire Satisfaction.

HOLCOMB'S ROCK, BEDFORD CO., VA.,

April 28, 1887.

The Hercules Wheel has given entire satisfaction.

Very respectfully,

J. A. HARRIS & CO.

Unhesitatingly Say Its the BOSS Wheel.

BUCKLE, GA., April 29, 1887.

I have been using a 21-inch "Hercules Water Wheel" since August 1880, and unhesitatingly say it is the BOSS wheel. It has performed with utmost satisfaction, and given more power than the makers claim, using water with more economy than any wheel I ever knew. T. W. G. Inglett, Esq., who has put up two "Hercules" for parties, says "it can't be beat."

Very respectfully,

BRAD. MERRY.

THE HERCULES

Gives the Most Power for its Size and the Highest Average Percentage from Full to One-Half Gate of Any Wheel Ever Made.

If you want to buy a new Water Wheel, if your old wheel does not give satisfaction, if you would like to know just how perfect a Water Wheel can be made, or if you are in any way interested in Water Wheels it will pay you to write for Catalogue No. 3 to the

HOLYOKE MACHINE CO., Worcester, Mass.

PITTSBURGH LOCOMOTIVE AND CAR WORKS,

PITTSBURGH, PA., Manufacturers of

Locomotive Engines for Broad or Narrow Gauge Roads,

From standard designs or according to specifications, to suit purchasers.

TANKS, LOCOMOTIVES OR STATIONARY BOILERS FURNISHED AT SHORT NOTICE.

A. STEWART, Pres't.

D. A. WIGHTMAN, Supt.

WILSON MILLER, Sec'y and Treas.



BUFFALO HAMMER CO., Buffalo, N. Y., U. S. A., Manufacturers of a full line of
Solid Cast Steel Hammers, Sledges, Mauls,



RAILROAD TRACK TOOLS, &c.

Every Hammer or Tool having our name is fully warranted. Catalogues and discounts sent on application.

BAGNALL & LOUD BLOCK CO. BOSTON, MASS.

Largest Manufacturers of Tackle Blocks in the World.

Manufacturers of the Latest Improved Self-Adjusting ROLLER BUSHED and GENUINE METALINE BUSHED and Iron Bushed Rope and Iron Strapped

TACKLE BLOCKS.

CLASP OPEN.



Improved Self-Adjusting Roller Bushed Iron Sheave.



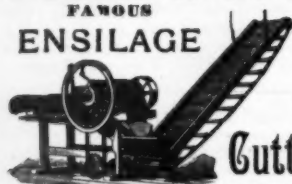
Improved Harcourt Patent Block.



Improved Self-Locking Link Snatch Block.

Send for the Celebrated
STAR BRAND.Send for Catalogue
No. 5.

THE Silver & Deming

FAMOUS
ENSILAGEAND
FEED
Cutters.

They are more substantial, easier to operate, have greater capacity, are less liable to accidents than any other Cutters. We build nine sizes, six for power, furnished with or without carriers. Our illustrated catalogue, containing also valuable information on the subject of Silos and Ensilage, sent free. Liberal discounts and terms to dealers. Write for prices.

Silver & Deming Manufacturing Co.
SALEM, OHIO.Subscribe to the MANUFACTURERS' RECORD
Price \$3.00 a year, or six months for \$1 50

SEND TO CLEVELAND MACHINE COMPANY,

143 to 161 Leonard Street, CLEVELAND, OHIO,

FOR PRICES ON THEIR

Solid Steel Forged Shears AND Scissors.

NEW CATALOGUE AND PRICE-LIST JULY 15, 1887.

NIAGARA STAMPING & TOOL CO.

MANUFACTURERS OF

Tinners' Machines & Tools,

—FOR WORKING SHEET METALS, &c.—

Fruit Can Dies and Tools.
Cannery's Outfits.

Squaring & Circle Shears, Presses, &c.

Superior, Cor. of Randall St., Buffalo, N. Y.

Write for our Catalogue and Price-List. Please mention this paper when writing.

D. SAUNDERS' SONS

MANUFACTURERS OF

Pipe Cutting and
Threading Machines,
For Pipe Mill and Steam
Fitters' Use.

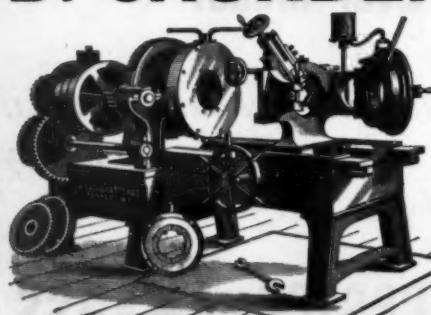
Tapping Machines

For Steam Fitting. Also,

STEAM AND GAS FITTERS
HAND TOOLS,
Athena Street.

Send for Catalogue B.

YONKERS, N. Y.



SEND FOR CIRCULARS.

G. A. Crosby & Co.

MANUFACTURERS OF

Presses. Dies.

AND

Special Machinery
FOR
Sheet Metal Workers.

259, 261 & 263

RANDOLPH ST.

CHICAGO, ILL.



Covert Manufacturing Company.



TRADE MARK

The Greatest Emporium in the World for the best Snaps,
Chain, Rope and Web Goods, &c., manufactured, is
the celebrated works of the

Covert Manufacturing Co. West Troy, N. Y.

For Sale by all Jobbers Handling this Class of Goods.

Phillips, with Augers.....	7.00	7.50
BRACKETS.			
Shelf, plain.....	dis	per doz
Shelf, heavy.....	dis	per doz
BRIGHT WIRE GOODS.			
New list.....	dis	750000
BULL RINGS.			
Union Nut Co.....	dis	55
Sargent's.....	dis	6000
Humason, Beckley & Co's.....	dis	70
BUTTS.			
Wrought Brass.....	dis	60
Cast Brass, Fast Joint.....	dis	330000
Cast Brass, Loose Joint.....	dis	330000
Fast Joint, Narrow.....	dis	6000
Fast Joint, Broad.....	dis	6000
Loose Joint.....	dis	6000
Loose Joint, Japanned.....	dis	6000
Loose Joint, Jap. with Acorn.....	dis	6000
Parliament Butts.....	dis	6000
Mayer's Hinges.....	dis	6000
Loose Pin, no Acorn.....	dis	6000
Loose Pin, Acorn.....	dis	6000
Loose Pin, Acorn, Japanned.....	dis	6000
Loose Pin, Acorn, Jap'd, Plated.....	dis	6000
Tips.....	dis	6000
Wrought Iron.			
Fast Joint, Narrow.....	dis	700
Fast Joint, Lt. Narrow.....	dis	700
Fast Joint, Broad.....	dis	700
Loose Joint, Broad.....	dis	700
Table Bolt, Black Flange, &c.....	dis	700
Inside Blind, Regular.....	dis	700
Inside Blind, Light.....	dis	700
Loose Pin, Wrt.....	dis	700
Loose Pin, Light.....	dis	700
Spring Hinges.....	dis	700
Geor's Spring and Blank Nuts.....	dis	700
Hart Manufacturing Co.....	dis	700
American Spring Hinges.....	dis	700
Gen Spring Hinges.....	dis	700
Blind Butt, Shepard's, No. 30 and 60.....	dis	700
Blind Butt, Shepard's, No. 50.....	dis	700
Blind Butts, Shepard's, No. 75.....	dis	700
Blind Butts, Lull & Porter.....	dis	700
Blind Butts, Huffer.....	dis	700
Blind Butts, Lull & Porter.....	dis	700
Standard Lull & Porter.....	dis	700
ROW FISH.			
Humason, Beckley & Co's.....	dis	1000
Sargent & Co's.....	dis	1000
Hotchkin.....	dis	1000
BUTCHER'S CLAWERS.			
Humason & Beckley Mfg. Co.....	dis	1000
Bradley.....	dis	1000
Beatty's.....	dis	1000
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5.....	dis	1000
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OFFICE MANUFACTURERS' RECORD, }
BALTIMORE, August 24, 1887. }

Ref. Bar Iron, 1 to 6x16 to 1.....	W. D. 2.10	2.40C
" " 1 to 4x16 to 1.....	2.10	2.40C
" " 1/2 to 9, round and	2.10	2.40C
square.....	2.10	2.40C
Hoop Iron, 1/4 wide and upward.....	2.90	3 C
Band Iron, from 1/4 to 6 in. wide.....	2.40	3 1/2 C
Horseshoe Iron.....	3	3 1/2 C
Wedge Iron.....	3	3 1/2 C
Black Diamond Cast Steel.....	8	9 C
Machinery Steel.....	3	3 1/2 C
Spring Steel.....	3	4 C
Common Horse Nails.....	1	9 C
Railroad Spikes, 5/16x16.....	2	9 C
Steel Boiler Plate.....	2	10 C
Iron Boiler Plate.....	2	10 C
Roller Tubs.....	50	off list

Baltimore Charcoal Wheel Iron (all Baltimore ore).....	\$7 00	00	99	00
Virginia C. B. Charcoal Wheel Iron....	\$8 00	00	99	00
Anthracite, No. 1.....	\$6 00	00	27	00
" " " " " " " " " " " " " " " "	18	00	00	00
" " " " " " " " " " " " " " " "	16	00	18	00
" " " " " " " " " " " " " " " "	14	00	17	00
Mottled and White.....	83	50	00	00
Old Rails.....	\$9 00	00	97	00
Old Steel Rails.....	91	00	97	00
No. 1 Wrought Scrap.....	91	00	97	50
Old Car Wheels.....	19	00	00	00

To our Friends and Customers:

Yours truly, THE GOOCH FREEZER CO.

PHILADELPHIA, August 23, 1887.

can account. Steel rails are \$37.50 and \$39 for winter, and \$39@40 for fall. Old rails are wanted in large lots at \$24 and a little less, and continue to sell in store lots at \$24.50. The usual reports are made by bridge builders and bridge iron makers. Prices are very strong for plates, angles, beams and channels, and there is even now no scarcity of business. Skelp iron is 1 90 to 2c. and active. The pipe iron makers expect to come to an understanding in a short time in regard to prices, which have been rather low. The merchant steel mills everywhere seem to be doing well and are selling their full product at high prices. Merchant iron is 2c. to 2.10 and nails rather slow at 2 10 to 2.25, but after the new combination takes hold we expect better prices.

Specially reported by ROGERS, BROWN & Co., Pig
Iron Commission.
CINCINNATI, August 22, 1887.

NOT-BLAST FOUNDRY.

Ohio and Southern Strong Coke No. 1.....	\$1.00	@ \$1.50
" " " " " " " " " " " " " " " "	No. 2.	@ .90
" " " " " " " " " " " " " " " "	No. 3..	@ .80
Ohio Soft Stonecoal, " " " " " " " " " " " "	No. 1.	@ .75
Ohio Soft Stonecoal, " " " " " " " " " " " "	No. 2.	@ .60
Mahoning and Shenango Valley Coals, " " " " " "	" " " " " "	@ .25
Hanging Rock Charcoal No. 1.....	" " " " " "	@ .35
" " " " " " " " " " " " " " " "	No. 2.	@ .30
Tennessee & Alabama Charcoal No. 1.....	" " " " " "	@ .35
" " " " " " " " " " " " " " " "	No. 2.	@ .30
PORE.		
Strong Neutral Coke.....	\$1.00	@ \$1.50
Mottled " " " " " " " " " " " " " " " "	.16	@ \$1.17
Cold Shortnings " " " " " " " " " " " " " " " "	.17	@ \$1.17
CAR WHEEL AND MALLEABLE.		
Southern Car-Wheel Iron.....	.25	@ .26
Hanging Rock Cold Blast, No. 1.....	.25	@ .26
Hanging Rock Cold Blast, No. 2.....	—	@ —
Lake Superior Malleable.....	.25	@ .26

Specially reported by ROGERS, BROWN & Co., Gay
 Building, 204 N. 3rd street, St. Louis. W. H.
 SHIELDS, Manager.

ST. LOUIS, August 22, 1887.

Prices continue to stiffen, though there is no quotable advance over last week's prices. Southern coke foundry irons of standard brands are getting scarcer every day, especially for quick delivery. Charcoal irons are a little more plentiful, especially for delivery 60 and 90 days hence. Of Ohio softeners none are offering and considerable of the softer grades of Southern coke iron and some imported Scotch is being sold to take its place. We quote for cash on cars St. Louis:

HOT-BLAST CHARCOAL.		
Missouri.....	\$1 00	\$2 80
Southern No. 1.....	\$1 50	\$2 50
Southern No. 2.....	\$1 00	\$2 00
COKE AND COAL.		
Southern No. 2.....	80	50
Southern No. 1 1/2.....	90	00
Southern No. 1.....	90	00
Ohio Soften No. 1 mill.....	12	50
Ohio Soften No. 2.....	12	00
CAR-WHEEL AND WALKABLE IRON.		
Southern.....	\$4	00
Lake Superior.....	\$4	00
CConnellsville Coke, (Frick's).....	—	6 15

COPPER WHEELS.	
Parker's.....	dis 45 ¢
Wilson's.....	dis 40 ¢
Logan & Strobridge.....	dis 45 ¢
Enterprise Mfg. Co.....	dis 25 ¢
COMPASSES, DIVIDERS, AC.	
Compasses.....	dis 70 ¢ to 1
Calipers.....	dis 70 ¢ to 1
Dividers.....	dis 70 ¢ to 1
Cock's Pencil.....	dis 10 ¢
COOPERS TOOLS.	
Bradley's.....	dis 12 ¢ to 50 ¢
Barrett's.....	dis 25 ¢
CROW BARS.	
Cast Steel.....	dis 34 ¢
Iron, Steel Points.....	dis 34 ¢
CURLING IRONS, AC.	
1/2, 5/8, 3/4 in., \$1.20, 2.00, 3.50.....	dis 10 ¢
Pinching Tongs.....	dis 35 ¢, 65 ¢, 1.00
Pinching Irons.....	dis 75 ¢, 1.00, 2.00
CURRY COMBS.	
Fitch's new list.....	dis 50 ¢ to 1
Hotchkins, Novelty, new list, July, 1880.....	dis 25 ¢
Hotchkins, Excelsior Superior Champion.....	dis 25 ¢
Lawrence, "Perfect".....	dis 25 ¢ to 1
Rubber.....	dis 10 ¢, 25 ¢
Sweet & Clarke.....	dis 50 ¢ to 1
Lusters.....	dis 25 ¢
CURTAIN PINS.	
Silvered Glass.....	net
White Enamel.....	net
CUTLERY.	
Association (Table).....	net
Naugatuck Cutlery Co.....	net
Excelsior Knife Co.....	net
Wilson's Butcher and Shoe Knives.....	dis 30 ¢
Ames' Shoe Knives.....	dis 30 ¢
Wm. Rogers Mfg. Co., Plated Cutlery.....	Net
DOG COLLARS.	
Embossed Gilt.....	dis 30 ¢
Leather.....	dis 40 ¢
Brass.....	dis 40 ¢
DOOR SPRINGS.	
Corry's Rod, regular size.....	dis 25 ¢, 50 ¢, 75 ¢
3/4 in. Light, April 1886.....	dis 10 ¢
Standard—10 to 15; 9 to 12.....	dis 60 ¢ to 1
8 to 6.....	dis 60 ¢ to 1
1 to 2.....	dis 60 ¢ to 1
Hercules.....	dis 50 ¢ to 1
DRAWING KNIVES.	
Middlesex Mfg. Co.....	dis 75 ¢
Crosman's No. 1.....	dis 50 ¢ to 1
Nobles Mfg. Co.....	dis 15 ¢
Bradley's.....	dis 35 ¢
Adjustable Handle.....	dis 30 ¢
P. S. & W.....	dis 75 ¢
Douglass.....	dis 75 ¢
DRILLS AND DRILL STOCKS.	
Blacksmiths.....	dis 65 ¢
Corry's Self Feeding.....	each, 75 ¢, 1.00
Breast, P. S. & W.....	dis 30 ¢
Breast, Wilson's.....	dis 30 ¢
Breast, Miller's Falls.....	each, 75 ¢, 1.00
Breast, Bartholomew's.....	each, 75 ¢, 1.00
Wilson's Drill Stocks.....	dis 10 ¢
Automatic Boring Tools.....	dis 25 ¢
Manner Drill Mfg. Co.....	dis 10 ¢
Double Bench Drill.....	dis 10 ¢, 25 ¢
XXX Post Drill.....	dis 10 ¢, 25 ¢
EGG BEATERS.	
Dover.....	dis 25 ¢, 50 ¢, 75 ¢
Acme.....	dis 25 ¢, 50 ¢, 75 ¢
Victoria.....	dis 25 ¢, 50 ¢, 75 ¢
ENAMELED AND TINNED WARE.	
Regular numbers.....	dis 6 ¢
Flour and F. F.....	dis 6 ¢
A. & E. Emery Paper.....	dis 30 ¢
KETTLES.	
Sauce Pans.....	dis 50 ¢ to 1
Tinned Sauce Pans.....	dis 30 ¢ to 1
Eucalyptus Pins—Brass.....	dis 50 ¢
MISCELLANEOUS.	
Door Lock.....	Same discounts as Door Locks
Brass Thread.....	dis 60 ¢
Wood.....	dis 25 ¢
FAUCETS.	
Fenn's.....	dis 40 ¢
Fenn's Cork Stope.....	dis 35 ¢
Star.....	dis 60 ¢
Pratt's Patent Petroleum.....	dis 40 ¢
Wey's Patent Key.....	dis 50 ¢
Anchor Lock.....	dis 45 ¢
Metallic Key, Leather Lined.....	dis 50 ¢ to 1
Cork Lined.....	dis 70 ¢
J. Sommer's Best Metallic Key.....	dis 40 ¢ to 1
J. Sommer's Cork Lined, 1st quality.....	dis 50 ¢
FILES.	
E. M. Boynton's.....	new list, dis 25 ¢
Western File Co.....	dis 60 ¢ to 1
Butcher's.....	dis 40 ¢ to 1
Double Bench.....	dis 60 ¢
H. Diaston & Sons (new list).....	dis 60 ¢
Heller Bros.' Horse Rasps.....	dis 30 ¢ to 1
Nicholson.....	dis 60 ¢ to 1
New American.....	dis 60 ¢ to 1
Union File Co.....	dis 60 ¢ to 1
Stubs, new list.....	dis 75 ¢ to 1, 25 ¢ off
FLUTING MACHINES.	
Knox, 1/4-inch Rolls.....	dis 35 ¢ each
Knox, 3/8-inch Rolls.....	dis 40 ¢ each
Knox, 1/2-inch Roll.....	dis 45 ¢
Knox, 3/4-inch Roll.....	dis 50 ¢
Knox, 1-inch Roll.....	dis 55 ¢
Crown, 1/4-inch, \$1.50; 3/8, \$2.00; 1/2, \$2.50 each.....	dis 35 ¢
Crown Jewell.....	dis 35 ¢
American, 1/4-inch, \$1.50; 3/8, \$2.00; 1/2, \$2.50 each.....	dis 35 ¢
Domestic Fluter.....	dis 35 ¢
Geneva Hand Fluter, White Metal, 1/2 to 1 1/2 in.....	dis 25 ¢
Geneva Hand Fluter, Nos. 1, 2, 3, 4, 5.....	dis 25 ¢
Geneva Hand Fluter, 1/2 to 1 1/2 in.....	dis 25 ¢
Geneva Hand Fluter and Sad Iron.....	dis 25 ¢, 50 ¢
PUMPS.	
Lawson & Brenner.....	dis 60 ¢ to 1
Remington.....	dis 50 ¢ to 1
Shelby & Fisher.....	dis 50 ¢ to 1
PRY BARS.	
Burnished list as follows.....	dis 70 ¢
No.....	dis 70 ¢
1.....	dis 70 ¢
2.....	

GLASS PUTS.		dis 35 ¢
Tinned and Enamelled.....		dis 40 ¢
Family, Hove's "Eureka".....		dis 40 ¢
Family, L. F. & C.'s "Handy".....		dis 40 ¢
GRINDSTONE FIXTURES.		
Sargent's Patent.....		dis 70 ¢
Reaming Hardware Co.....		dis 33 1/2 ¢
GUN WADS.		
Key's B. K. wads, 11 upwards.....		\$1.75
" " 9 and 10.....		.80
" " 7 and 8.....		.60
" P. E. 11 upwards.....		2.50
" " 9 and 10.....		3.85
" " 7 8.....		4.45
HAMMERS.		
Maydole's.....		dis 95 ¢
Hartford Hammer Co.....		dis 40 ¢
Warner & Noble's.....		dis 30 ¢
Kip's or Selsor's.....		dis 30 ¢
Yerkes & Plumb.....		dis 40 ¢
Hartford Hammer Co's New List— Hammers.....		dis 40 ¢
Sledges.....		dis 60 ¢
Mason and Spalling Hammers, &c.....		dis 60 ¢
HANDLINGS.—Door or Hatch Latches.		
No. 0 1 2 3 4		
Per doz., \$.50 1.00 1.12 1.35 1.50.....		dis 60 ¢
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Jap'd Iron Drop Latches.....		dis 70 ¢
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Barn Door.....		dis 30 ¢
Wrought A-W Chest.....		dis 65 ¢
Surface Chest.....		dis 55 ¢
Flush Chest.....		dis 55 ¢
Lifting.....		dis 50 ¢
Saw and Plane.....		dis 40 ¢
Lippincott Cross-Cut Saw.....		soc. per pair
Hammer and Hatchet.....		dis 30 ¢
Crown A-W Chest.....		dis 65 ¢
Chisel, all kinds.....		dis 50 ¢
Auger, assorted, \$ gross, \$5.00.....		dis 40 ¢
Auger, large, \$ gross, \$7.00.....		dis 40 ¢
Patent Auger, ivex'.....		dis 25 ¢
Patent Auger, Douglas'.....		set \$1.25 net
Patent Auger, Swan's.....		set \$1.50 net
HAMMOCK CHAIRS.		
White Mountain, per doz.....		\$7.00
Finished in red, per doz.....		\$7.00
HANGERS.		
Cronk Hanger Co.....		
No. 4, per doz. pair.....		\$12.00, 50 ¢
" " No. 1.....		14.40, 50 ¢
" " No. 2.....		11.00, 50 ¢
Iron clad track.....		9 cents per unit, 50 ¢
Barn door stays.....		\$3.00 per unit, 50 ¢
Anti-Friction Barn Door Hanger, \$ doz. pair, \$5.00 net Cronk's Pat. Wire Cutter and Bender, 8 in., \$ doz. pair.....		\$15.00 & 40 ¢
" " doz. pair.....		\$12.00 & 40 ¢
Barn Door, old patterns.....		dis 60 ¢
Barn Door, New England.....		dis 60 ¢
Climax (Anti-Friction).....		dis 50 ¢
Warner's.....		dis 50 ¢
Richard's.....		dis 50 ¢
Ridder.....		dis 50 ¢
Pearson.....		dis 40 ¢
Smith.....		dis 40 ¢
HATCHETS.		
Underhill's.....		40 ¢
Price Solid Steel.....		\$6.00 net
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Claw, No. 1 & 3.....		dis 7.75 8.50 9.25
Lathing, No. 1 & 3.....		dis 7.50 8.00 8.50
Hammond's new list.....		dis 40 ¢
Blood's.....		dis 35 ¢
Hunt's.....		dis 40 ¢
Russell's, low list.....		dis 40 ¢
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Gem.....		dis 75 ¢
"Lightning".....		dis \$1.00 net
Wadsworth's.....		dis \$1.00 net
Plate Hinges, \$1.00 lb.....		35 ¢
"Providence" over 12 in.....		40 ¢
Screw Hook, 8 to 10, 12 in.....		30 ¢
and Strap, 1 1/2 to 36 in.....		30 ¢
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Crown Screen Door Latch.....		dis 50 ¢
Crown Christmas-Tree Holders, 2-inch, \$ doz.; 3-inch, \$1.00.....		dis 50 ¢
Bickford Portable Pump.....		each \$6, dis 20 ¢
American Cake Mixer, No. 6.....		each \$3.50, dis 20 ¢
American Tobacco Cutter.....		dis 25 ¢
A. M. Co. Clothes Wringer, No. 1 rolls, 10x14; No. 2, 12x14; No. 3 Japan, \$1.00 doz.; No. 2 Galv. \$2.00 doz.; No. 3 1/2 Galv. \$3.00 doz.....		dis 20 ¢
Heavy Welded Hook (\$20 in. \$7.50 \$100 lb.) \$15 in. & up, \$5 \$100 lb.) 20 ¢		
Screw Hook and Eye.....		dis 30 ¢
" " doz.....		dis 25 ¢
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Standard Spring Hinges, single and double action, dis. 60 ¢		
HOES.		
Planters.....		dis 60 ¢
Riveted Shank.....		dis 60 ¢
Grub.....		dis 60 ¢
Calico's Pat. Solid C. S. Scovill Pattern.....		dis 60 ¢
Hick's Pat. Solid C. S. Scovill Pattern.....		dis 60 ¢
Hubbard, Bakewell & Co.....		dis 60 ¢
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Axe, Pick, Sledge, Hammer and Hatchet.....		dis 25 ¢
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Available: Nos. 5 6 7 8 9 10		
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Finish'd \$ doz.....		dis 30 ¢
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Clinch, Fin'd ".....		dis 30 ¢
Kesey, ".....		dis 30 ¢
Futnam ".....		dis 30 ¢
Serraco ".....		dis 30 ¢
Globe, ".....		dis 30 ¢
N'thu's ".....		dis 30 ¢
Phoenix ".....		dis 30 ¢
Cumplan ".....		dis 30 ¢
Forged \$ doz.....		dis 30 ¢
A. C. ".....		dis 30 ¢
" " doz.....		dis 30 ¢
New Haven.....		dis 30 ¢
Capwell.....		dis 30 ¢
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Burden.....		\$4.10 1/2 keg
Phoenix Light, Medium and Heavy Horse Shoes.....		\$4.10 1/2 keg
Phoenix Metal Shoes.....		\$5.10 1/2 keg
Bryden Forged Horse Shoes— Frog Pressure.....		\$5.00 1/2 keg
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Perkins Horse Shoe.....		\$4.10 1/2 keg
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Fig. 1.



Fig. 2.



Fig. 3.



Fig. 4.



Fig. 5.

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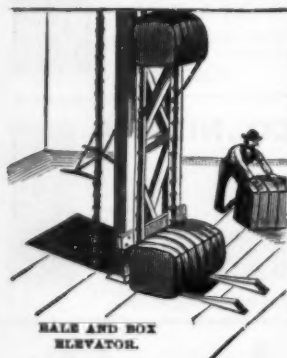
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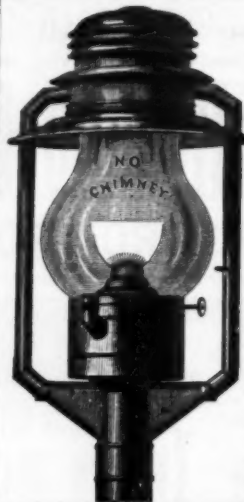
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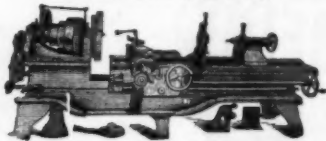
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70 "
100 "

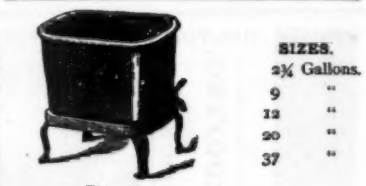
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PLAIN OR ENAMELED.



SIZES.
1 Gallons.
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10 "
15 "
25 "
30 "
50 "
60 "
80 "
125 "

Double Jacket Steam Kettle.



SIZES.
2 1/2 Gallons.
9 "
12 "
20 "
37 "

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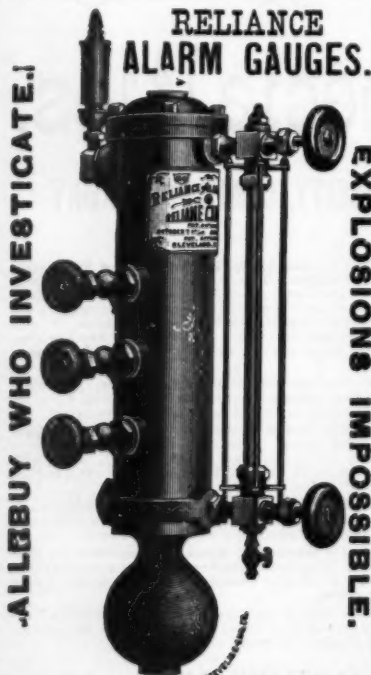
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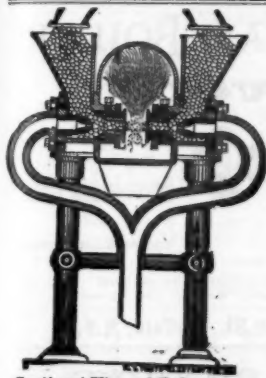
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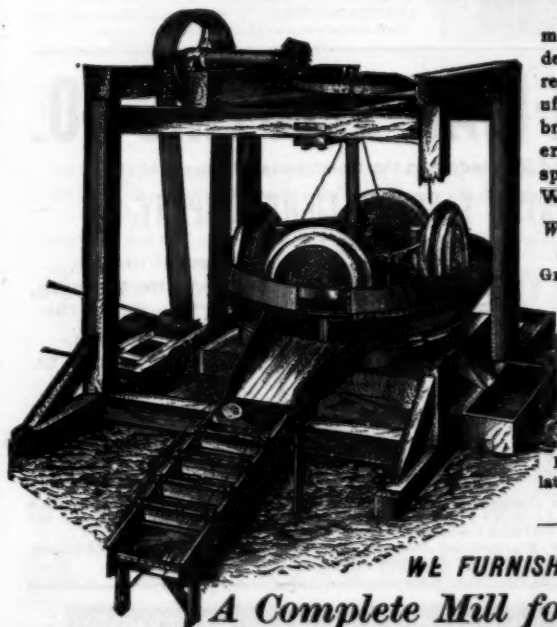


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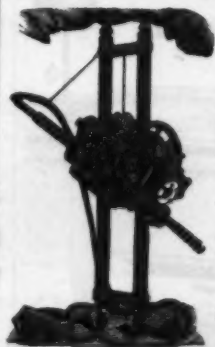
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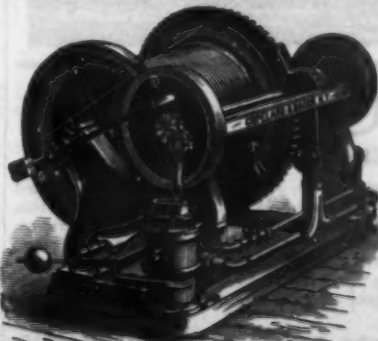
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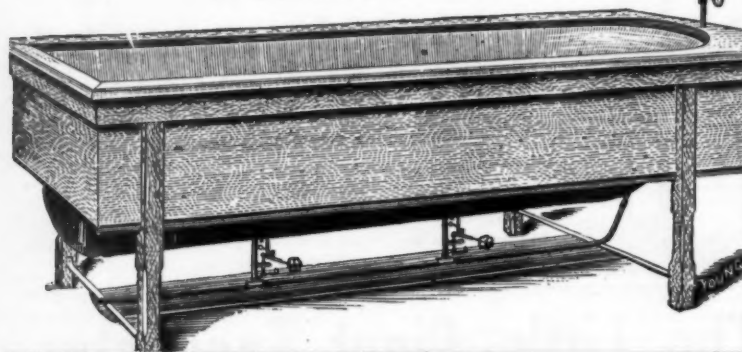
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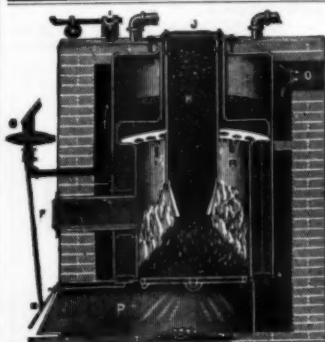
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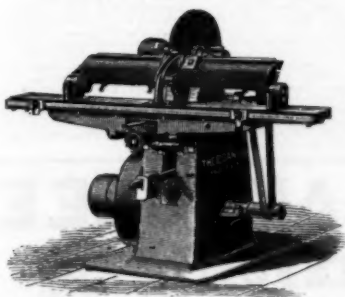
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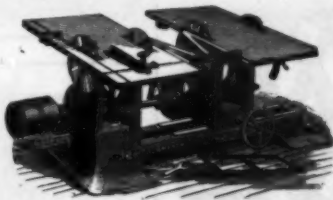
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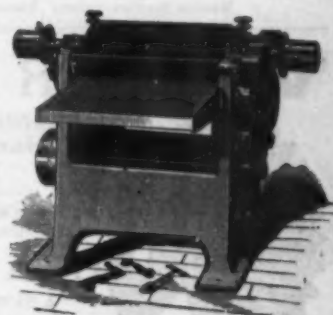
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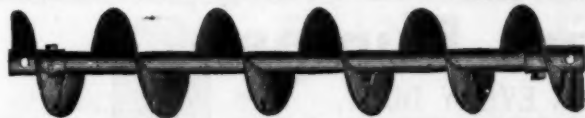
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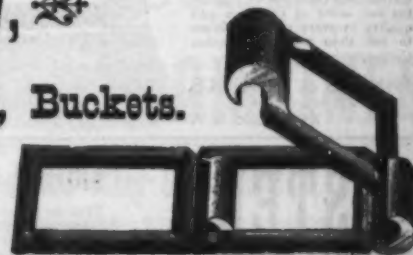
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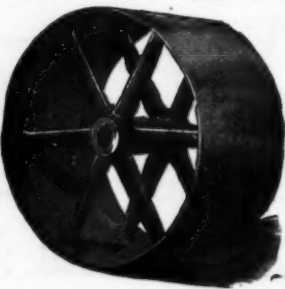
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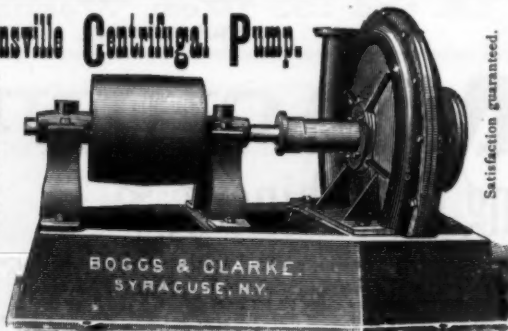
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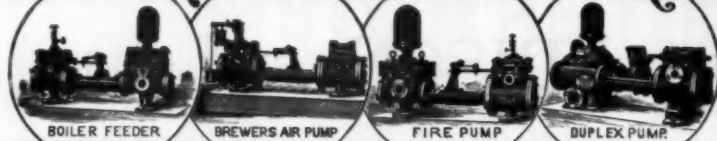
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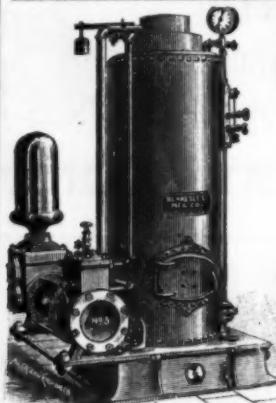
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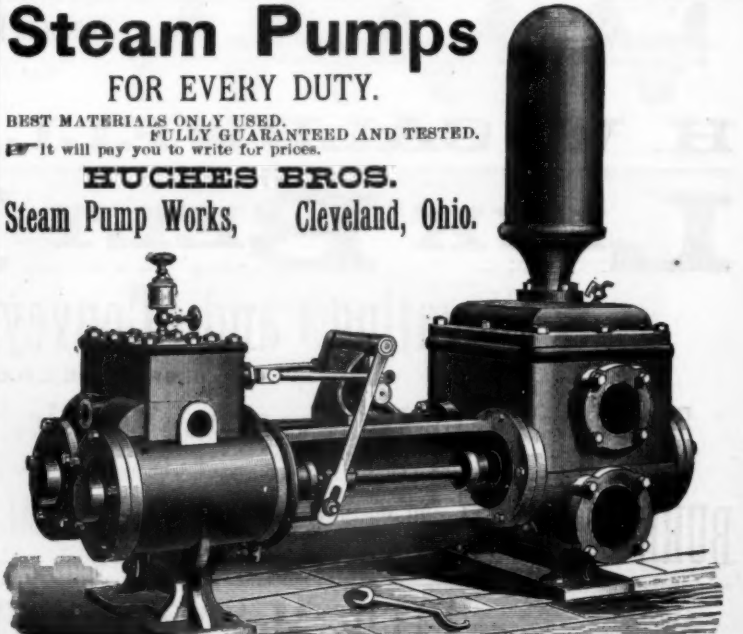
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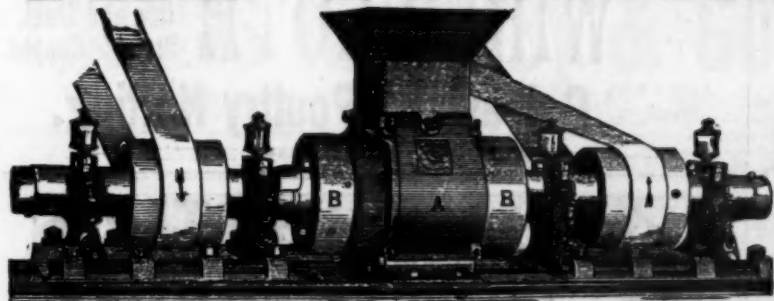
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